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**Term:**

(ink jet or inkjet or ink-jet) recording  
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<u>L6</u>	L5 and (ink jet or inkjet or ink-jet)	13	<u>L6</u>
<u>L5</u>	(QUINTENS-DIRK\$ or AERT-HUBERTUS\$).in.	40	<u>L5</u>
<u>L4</u>	(QUINTENS-DIRK\$ or AERT-HUBERTUS\$ or QUINTENS\$ or AERT\$).in.	367	<u>L4</u>
<u>L3</u>	L2 and (ink jet or inkjet or ink-jet)	45	<u>L3</u>
<u>L2</u>	(POLYSOL\$ or MOWILITH\$ or MOWILITH\$ or ENOREX\$ or CLAVIFIX\$)	920	<u>L2</u>
<u>L1</u>	10/054,210	1	<u>L1</u>

END OF SEARCH HISTORY

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STRUCTURE FILE UPDATES: 3 NOV 2003 HIGHEST RN 612478-18-9  
 DICTIONARY FILE UPDATES: 3 NOV 2003 HIGHEST RN 612478-18-9

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

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Experimental and calculated property data are now available. See HELP  
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 in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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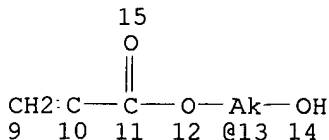
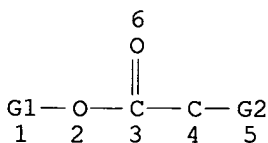
FILE COVERS 1907 - 4 Nov 2003 VOL 139 ISS 19  
 FILE LAST UPDATED: 3 Nov 2003 (20031103/ED)

This file contains CAS Registry Numbers for easy and accurate  
 substance identification.

=> d que

L3

STR



*6,109 from  
this query*

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VAR G2=AK/CB  
NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE  
L5 6109 SEA FILE=REGISTRY SSS FUL L3  
L7 6322 SEA FILE=HCAPLUS ABB=ON L5  
L8 52 SEA FILE=HCAPLUS ABB=ON L7(L) (INK(W) JET? OR INKJET?)

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L8 ANSWER 1 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
AN 2003:527632 HCAPLUS  
DN 139:102539  
TI Oil-based inks for electrostatic type ink-jet printing with good delivery  
and sharp image  
IN Kato, Eiichi  
PA Fuji Photo Film Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 40 pp.  
CODEN: JKXXAF

DT Patent  
LA Japanese  
IC ICM C09D011-00  
ICS B41J002-01; B41M005-00  
CC 42-12 (Coatings, Inks, and Related Products)  
Section cross-reference(s): 74

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003192960	A2	20030709	JP 2001-396975	20011227
PRAI	JP 2001-396975		20011227		

AB The inks contain a nonaq. carrier liquid having elec. resistance of  $\geq 109 \Omega$  and permittivity of  $\leq 3.5$ , and charge carrier resin particles dispersed in the liquid where the particles are prepared by polymerizing (A) monofunctional monomers which are soluble in a nonaq. solvent initially but become insol. in the solvent after polymerized, with (B) comonomers bearing both amino group and PO<sub>3</sub>H<sub>2</sub> group or SO<sub>3</sub>H group and (C) macromers having Mw of  $\leq 2 \times 10^4$  in the presence of a specific dispersing assistant. Thus, polymerizing octadecyl methacrylate in the presence of 3-mercaptopropionic acid and AIBN and capping the resulting telomer with glycidyl methacrylate gave a macromer which was copolymd. with Me methacrylate, Me acrylate and 4-[ethyl[(phosphonooxy)methyl]amino] butyl methacrylate in the presence of a Me acrylate-Me methacrylate-stearyl methacrylate block copolymer (dispersant) to give a copolymer as particles useful for charge carrier for electrostatic type ink-jet printing ink.

ST dispersion polymn phosphonooxyalkylaminoalkyl methacrylate macromer copolymer electrostatic printing ink

IT Isoalkanes  
RL: NUU (Other use, unclassified); USES (Uses)

- (C9-12, Isopar G; manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)
- IT Styrene-butadiene rubber, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (block, dispersants from Solprene 1205; manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)
- IT Polymerization  
 (dispersion; manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)
- IT Inks  
 (jet-printing; manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)
- IT Dispersing agents  
 (manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)
- IT Macromonomers  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)
- IT 557800-09-6P 557800-10-9P 557800-11-0P 557800-12-1P 557800-13-2P  
 557800-14-3P 557800-15-4P 557800-17-6P 557800-18-7P 557800-19-8P  
 557800-20-1P 557800-21-2P 557800-23-4P 557800-25-6P 557800-27-8P  
 557800-28-9P 557800-29-0P 557800-30-3P 557800-31-4P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (charge carrier; manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)
- IT 25719-52-2D, Lauryl methacrylate polymer, telechelic derivative 30525-99-6D, Tetradecyl methacrylate homopolymer, telechelic derivative 60542-45-2, 2-Hydroxyethyl methacrylate-stearyl methacrylate copolymer 128921-17-5D, telechelic derivative 169329-20-8, Glycidyl methacrylate-stearyl methacrylate-styrene graft copolymer 305814-25-9 **557105-34-7**  
 557105-35-8 557105-36-9 557105-37-0 557105-38-1 557105-39-2  
 557105-41-6 557105-60-9 557800-32-5  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (dispersants; manufacture of oil-based inks for electrostatic type **ink-jet** printing with good delivery and sharp image)
- IT 106-91-2DP, Glycidyl methacrylate, esters with telomer-like compds. 138005-15-9DP, azobiscyanovaleric acid-initiated, ester with glycidyl methacrylate 139104-87-3P 139104-90-8P, Hexadecyl methacrylate-3-mercaptopropionic acid telomer, ester with glycidyl methacrylate 139105-08-1P, Octadecyl methacrylate-3-mercaptopropionic acid telomer, ester with glycidyl methacrylate 139105-12-7P, Tridecyl methacrylate-3-mercaptopropionic acid telomer, ester with glycidyl methacrylate 147130-44-7P 164848-45-7P, Octadecyl acrylate-3-mercaptopropionic acid telomer, ester with glycidyl methacrylate 214835-07-1P 215877-54-6P 215877-61-5P 215877-71-7P 558466-33-4P, Pentanedioic acid 3-methyl-3-butenyl tetradecyl ester-3-mercaptopropionic acid telomer, ester with glycidyl methacrylate 558466-36-7P, Butanedioic acid 3-methyl-3-butenyl dodecyl ester-3-mercaptopropionic acid telomer, ester with glycidyl methacrylate 558466-40-3P, Maleic acid 3-butenyl dodecyl ester-3-mercaptopropionic acid telomer, ester with glycidyl methacrylate 558466-44-7P 558466-47-0P  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (macromer for charge carrier; manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)

IT 106107-54-4

RL: MOA (Modifier or additive use); USES (Uses)

(styrene-butadiene rubber, block, dispersants from Solprene 1205; manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)

IT 557105-34-7

RL: MOA (Modifier or additive use); USES (Uses)

(dispersants; manufacture of oil-based inks for electrostatic type **ink-jet** printing with good delivery and sharp image)

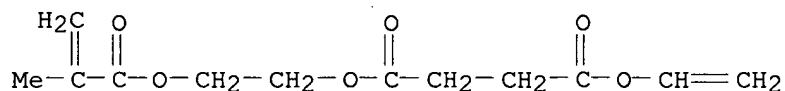
RN 557105-34-7 HCAPLUS

CN Butanedioic acid, ethenyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with tridecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 100904-40-3

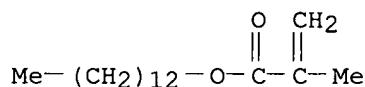
CMF C12 H16 O6



CM 2

CRN 2495-25-2

CMF C17 H32 O2



L8 ANSWER 2 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:527629 HCAPLUS

DN 139:102538

TI Oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image

IN Kato, Eiichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 33 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D011-00

ICS B41J002-01; B41M005-00; B41C001-10

CC 42-12 (Coatings, Inks, and Related Products)

Section cross-reference(s): 74

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003192953	A2	20030709	JP 2001-394358	20011226
PRAI	JP 2001-394358		20011226		

AB The inks contain a nonaq. carrier liquid having elec. resistance of

$\geq 109 \Omega$  and permittivity of  $\leq 3.5$ , and charge carrier resin particles dispersed in the liquid where the particles are prepared by polymerizing (A) monofunctional monomers which are soluble in a nonaq. solvent initially but become insol. in the solvent after polymerized, with (B) comonomers bearing both amino group and PO<sub>3</sub>H<sub>2</sub> group or SO<sub>3</sub>H group in the presence of a dispersing assistant which is soluble in the nonaq. solvent and bears ester or ether groups. Thus, adding a mixture of Me methacrylate 30, Me acrylate 60, CH<sub>2</sub>:CMeCOO(CH<sub>2</sub>)<sub>4</sub>N<sup>+</sup>(Et)HCH<sub>2</sub>OP(O)(OH)O<sup>-</sup> 10, EtOH 50 and 2,2'-azobis(isovaleronitrile) 1.5 over 1.5 h to a mixture of Me acrylate-Me methacrylate-stearyl methacrylate block copolymer (dispersant) 12 and Isopar H 250, mixing for 2 h, adding 2,2'-azobis(isovaleronitrile) 0.8 g, heating with stirring at 80° for 3 h, heating to 100° while reducing the pressure to 200 mm-Hg and stirring for 2 h to remove unreacted monomers, cooling and sieving through a 200-mesh nylon fabric gave a dispersion containing microparticles with average diameter of 0.45  $\mu$ m,

Mw

1x10<sup>5</sup> and T<sub>g</sub> 40°. Mixing the dispersion with a pigment paste, additives and solvent gave an electrostatic ink.

ST dispersion polym phosphonooxyalkylaminoalkyl methacrylate copolymer electrostatic jet printing ink

IT Isoalkanes

RL: NUU (Other use, unclassified); USES (Uses)

(C9-12, solvent from Isopar G; manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)

IT Styrene-butadiene rubber, uses

RL: MOA (Modifier or additive use); USES (Uses)

(block, Solprene 1205; manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)

IT Polymerization

(dispersion; manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)

IT Inks

(jet-printing; manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)

IT Dispersing agents

(manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)

IT 524745-46-8P, 4-[Ethyl[(phosphonooxy)methyl]amino]butyl

methacrylate-methyl acrylate-methyl methacrylate copolymer 524745-48-0P

524745-49-1P 524745-51-5P 524745-55-9P 524745-60-6P 557105-17-6P

557105-19-8P 557105-21-2P 557105-22-3P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(charge carrier; manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)

IT 25719-52-2D, cyanomethacrylate-initiated 30525-99-6D,

cyanomethacrylate-initiated 34888-27-2D, Dodecyl methacrylate-2-hydroxyethyl methacrylate copolymer, esters with unsatd. acid derivative

60542-45-2 128921-17-5D, acryloyloxyethyl-terminated 150469-59-3

159967-36-9, Methyl acrylate-methyl methacrylate-octadecyl methacrylate block copolymer 205105-54-0, Glycidyl methacrylate-stearyl

methacrylate-styrene copolymer 557105-33-6 **557105-34-7**

557105-35-8 557105-36-9 557105-37-0 557105-38-1 557105-39-2

557105-41-6

RL: MOA (Modifier or additive use); USES (Uses)

(dispersant; manufacture of oil-based inks for electrostatic type **ink-jet** printing with good delivery and sharp image)

IT 524745-75-3P 557105-23-4P 557105-25-6P 557105-27-8P 557105-28-9P

557105-29-0P 557105-31-4P 557105-32-5P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)

IT 106107-54-4

RL: MOA (Modifier or additive use); USES (Uses)

(styrene-butadiene rubber, block, Solprene 1205; manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)

IT 557105-34-7

RL: MOA (Modifier or additive use); USES (Uses)

(dispersant; manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)

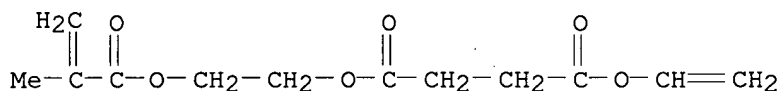
RN 557105-34-7 HCAPLUS

CN Butanedioic acid, ethenyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with tridecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 100904-40-3

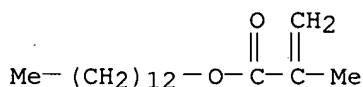
CMF C12 H16 O6



CM 2

CRN 2495-25-2

CMF C17 H32 O2



L8 ANSWER 3 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:525541 HCAPLUS

DN 139:102532

TI Oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image

IN Kato, Eiichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 34 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D011-00

ICS B41J002-01; B41M005-00

CC 42-12 (Coatings, Inks, and Related Products)

Section cross-reference(s): 74

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003192959	A2	20030709	JP 2001-396974	20011227
PRAI	JP 2001-396974		20011227		
AB	<p>The inks contain a nonaq. carrier liquid having elec. resistance of <math>\geq 109 \Omega</math> and permittivity of <math>\leq 3.5</math>, and charge carrier resin particles dispersed in the liquid where the particles are prepared by polymerizing (A) monofunctional monomers which are soluble in a nonaq. solvent initially but become insol. in the solvent after polymerized, with (B) comonomers bearing both amino group and PO<sub>3</sub>H<sub>2</sub> group or SO<sub>3</sub>H group and (C) comonomers bearing F- or/and Si-containing groups in the presence of a dispersing assistant which is soluble in the nonaq. solvent and bearing ester or ether groups. Thus, adding a mixture of Me methacrylate 30, Me acrylate 56, CH<sub>2</sub>:CMeCOO(CH<sub>2</sub>)<sub>4</sub>N+(Et)HCH<sub>2</sub>OP(O)(OH)O- 10, CH<sub>2</sub>:CMeCOO(CH<sub>2</sub>)<sub>3</sub>SiMe<sub>2</sub>(OSiMe<sub>2</sub>)<sub>2</sub>OSiMe<sub>3</sub> 4, EtOH 50 and 2,2'-azobis(isovaleronitrile) 1.5 over 1.5 h to a mixture of Me acrylate-Me methacrylate-stearyl methacrylate block copolymer (dispersant) 12 and Isopar H 250, mixing for 2 h, adding 2,2'-azobis(isovaleronitrile) 0.8 g, heating with stirring at 80° for 3 h, heating to 100° while reducing the pressure to 200 mm-Hg and stirring for 2 h to remove unreacted monomers, cooling and sieving through a 200-mesh nylon fabric gave a dispersion containing microparticles with average diameter of 0.45 <math>\mu</math>m,</p>				
Mw	<p>1x10<sup>5</sup> and Tg 40°. Mixing the dispersion with a pigment paste, additives and solvent gave an electrostatic ink.</p>				
ST	<p>dispersion polymn phosphonoxyalkylaminoalkyl methacrylate copolymer electrostatic jet printing ink</p>				
IT	<p>Isoalkanes RL: NUU (Other use, unclassified); USES (Uses) (C9-12, solvent Isopar G; manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)</p>				
IT	<p>Styrene-butadiene rubber, uses RL: MOA (Modifier or additive use); USES (Uses) (block, Solprene for dispersant; manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)</p>				
IT	<p>Polymerization (dispersion; manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)</p>				
IT	<p>Inks (jet-printing; manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)</p>				
IT	<p>Dispersing agents (manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)</p>				
IT	557105-42-7P	557105-43-8P	557105-45-0P	557105-46-1P	557105-47-2P
	557105-49-4P	557105-51-8P	557105-52-9P	557105-53-0P	557105-55-2P
	557105-56-3P	557105-57-4P	557105-58-5P	557105-61-0P	557105-62-1P
	557105-63-2P	557105-64-3P	557105-65-4P	557105-66-5P	
	<p>RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (charge carrier; manufacture of oil-based inks for electrostatic type ink-jet printing with good delivery and sharp image)</p>				
IT	<p>25719-52-2D, Dodecyl methacrylate homopolymer, reaction products with cyanomethacrylate initiators 60542-45-2 87625-18-1D, reaction products with cyanomethacrylate initiators 128921-17-5D, acryloyloxybutyl-terminated 159967-36-9, Methyl acrylate-methyl methacrylate-octadecyl methacrylate block copolymer 557105-34-7 557105-35-8 557105-36-9 557105-37-0 557105-38-1 557105-39-2 557105-41-6</p>				

557105-59-6 557105-60-9

RL: MOA (Modifier or additive use); USES (Uses)  
(dispersant; manufacture of oil-based inks for electrostatic type  
**ink-jet** printing with good delivery and sharp image)

IT 106107-54-4

RL: MOA (Modifier or additive use); USES (Uses)  
(styrene-butadiene rubber, block, Solprene for dispersant; manufacture of  
oil-based inks for electrostatic type ink-jet printing with good  
delivery and sharp image)

IT 557105-34-7

RL: MOA (Modifier or additive use); USES (Uses)  
(dispersant; manufacture of oil-based inks for electrostatic type  
**ink-jet** printing with good delivery and sharp image)

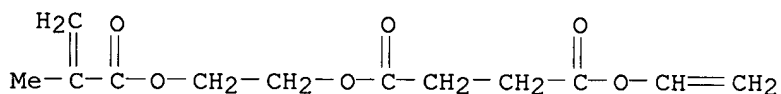
RN 557105-34-7 HCAPLUS

CN Butanedioic acid, ethenyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester,  
polymer with tridecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 100904-40-3

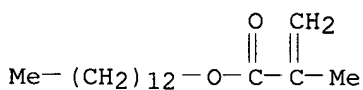
CMF C12 H16 O6



CM 2

CRN 2495-25-2

CMF C17 H32 O2



L8 ANSWER 4 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:369044 HCAPLUS

DN 138:370460

TI Oil-based inks for electrostatic ink-jet printing producing images with  
good clarity and high strength and freedom from nozzle clogging

IN Kato, Eiichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 42 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D011-00

ICS B41J002-01; B41M005-00; C08F002-44; C08F008-00; C08F212-14;  
C08F220-04; C08F220-18; C08F220-28; C08F230-08; C08F291-00

CC 42-12 (Coatings, Inks, and Related Products)

Section cross-reference(s): 74

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003138183	A2	20030514	JP 2001-342008	20011107
PRAI	JP 2001-342008		20011107		
AB	<p>The inks useful for lithog. printing plate production, are prepared in a nonaq. carrier liquid having elec. resistance of &gt;109 <math>\Omega</math>.cm and permittivity of &lt;3.5 and contain partially crosslinked copolymer particles derived from the polymerization and granulation of (A) nonaq. solvent-soluble monofunctional monomers which become insol. in the solvent after polymerized, with (B) comonomers bearing amino group and -PO<sub>3</sub>H<sub>2</sub> group or SO<sub>3</sub>H group and other desired comonomers in the presence of dispersion stabilizing resins. Thus, heating octadecyl methacrylate 100 with divinylbenzene 1.0 and PhMe 200 under N to 85°, adding AIBN 3.0, reacting for 4 h, adding AIBN 1.0, reacting for 2 h, further adding AIBN 0.5 g, reacting for 2 h, cooling and working up gave 88 g a white powder with Mw 3.3x10<sup>4</sup>. Heating 12 g the powder (as dispersant) with Isopar H (solvent) 250 to 70°, adding Me methacrylate 30, Me acrylate 60, CH<sub>2</sub>:C(Me)COO(CH<sub>2</sub>)<sub>4</sub>N<sup>+</sup>(Et)HCH<sub>2</sub>OPO-(O)OH 10, EtOH 50 and 2,2'-azobis[isovaleronitrile] (I) 1.5, mixing for 2 h, adding I 1.0, mixing at 75° for 3 h, further adding I 0.8 g, mixing at 80° for 3 h, heating to 100° and removing remaining monomers at 200 mm-Hg, cooling, and sieving through a 200-mesh nylon fabric gave a white powder (B) with average diameter of 0.45 <math>\mu</math>m, Mw 1x10<sup>5</sup> and Tg 40°. An oil-based ink useful for lithog. printing plate production was prepared by mixing 50 g the powder (B) with 18 g a pigment dispersion containing poly(dodecyl methacrylate) 10, alkali blue 10 and Shellsol 71 (paraffin oil) 30 g, and 0.15 g Co octenoate and diluting with 1 L Isopar E.</p>				
ST	lithog printing plate prodn static ink jet printing ink				
IT	<p>Isoalkanes            RL: NUU (Other use, unclassified); USES (Uses)            (C9-12, solvents; manufacture of oil-based inks for electrostatic ink-jet printing producing images with good clarity and high strength and freedom from nozzle clogging)</p>				
IT	<p>Inks            (jet-printing; manufacture of oil-based inks for electrostatic ink-jet printing producing images with good clarity and high strength and freedom from nozzle clogging)</p>				
IT	<p>Dispersing agents            Lithographic plates            (manufacture of oil-based inks for electrostatic ink-jet printing producing images with good clarity and high strength and freedom from nozzle clogging)</p>				
IT	<p>61255-17-2P, Divinylbenzene-dodecyl methacrylate copolymer 107533-90-4P,            Allyl methacrylate-dodecyl methacrylate copolymer 122324-74-7P,            Divinylbenzene-octadecyl methacrylate copolymer 130805-21-9P,            Divinylbenzene-tridecyl methacrylate copolymer 130805-26-4P, .            Divinylbenzene-hexadecyl methacrylate copolymer 134140-17-3P,            Divinylbenzene-styrene-tetradecyl methacrylate copolymer 134240-04-3P,            Ethylene glycol diacrylate-octadecyl methacrylate copolymer            134266-79-8P, Hexadecyl methacrylate-propylene glycol dimethacrylate            copolymer 134266-81-2P, 2-Chloroethyl methacrylate-tridecyl            methacrylate-trimethylolpropane trimethacrylate copolymer 137564-54-6P,            Divinylbenzene-2-hydroxyethyl methacrylate-octadecyl methacrylate            copolymer 148532-67-6P, Dodecyl methacrylate-octyl methacrylate-            trivinylbenzene copolymer 148532-69-8P, N,N-Dimethylaminoethyl            methacrylate-dodecyl methacrylate-ethylene glycol diacrylate copolymer  <b>148532-81-4P</b>, Divinyl adipate-hexadecyl methacrylate copolymer            161077-96-9P, Divinylbenzene-octadecyl methacrylate-vinyl acetate</p>				

copolymer 161077-98-1P, Divinylbenzene-octadecyl methacrylate-4-vinylbenzenecarboxylic acid copolymer 161078-01-9P 161078-02-0P, 11-(Acrylamido)undecanoic acid-divinylbenzene-octadecyl methacrylate copolymer 308283-76-3P, Docosyl methacrylate-polyethylene glycol diacrylate copolymer 459427-57-7P, 2-Carboxyethyl acrylate-divinylbenzene-octadecyl methacrylate copolymer 459427-58-8P,  $\alpha$ -Chloroacrylic acid-divinylbenzene-octadecyl methacrylate copolymer 459427-59-9P 524745-38-8P, Ethylene glycol dimethacrylate-3-(trimethylsilyloxydimethylsilyl)propyl methacrylate copolymer 524745-39-9P 524745-41-3P 524745-42-4P 524745-43-5P 524745-44-6P, Methyl methacrylate-octadecyl methacrylate-propylene glycol diacrylate copolymer

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(dispersants; manufacture of oil-based inks for electrostatic **ink-jet** printing producing images with good clarity and high strength and freedom from nozzle clogging)

IT 524745-46-8P 524745-48-0P 524745-49-1P 524745-51-5P 524745-53-7P  
524745-55-9P 524745-58-2P 524745-59-3P 524745-60-6P 524745-65-1P  
524745-69-5P 524745-74-2P 524745-75-3P 524745-76-4P 524745-78-6P  
524745-80-0P 524745-82-2P 524745-84-4P 524745-86-6P 524745-87-7P  
524745-89-9P 524745-91-3P 524745-93-5P 524745-95-7P 524745-97-9P  
524745-99-1P 524746-04-1P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(powder; manufacture of oil-based inks for electrostatic ink-jet printing producing images with good clarity and high strength and freedom from nozzle clogging)

IT 148532-81-4P, Divinyl adipate-hexadecyl methacrylate copolymer

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(dispersants; manufacture of oil-based inks for electrostatic **ink-jet** printing producing images with good clarity and high strength and freedom from nozzle clogging)

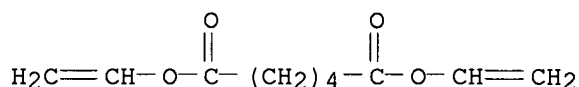
RN 148532-81-4 HCAPLUS

CN Hexanedioic acid, diethenyl ester, polymer with hexadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 4074-90-2

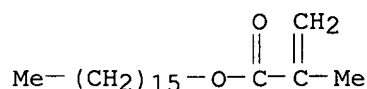
CMF C10 H14 O4



CM 2

CRN 2495-27-4

CMF C20 H38 O2



L8 ANSWER 5 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 2002:768009 HCAPLUS  
 DN 137:295646  
 TI Colored resin emulsion, ink-jet printing ink and color filter  
 IN Ishii, Masahiro  
 PA Sekisui Chemical Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C08L101-00  
 ICS B41J002-01; B41M005-00; C08K005-00; C08L033-24; C09D011-00;  
 G02B005-20

CC 37-6 (Plastics Manufacture and Processing)  
 Section cross-reference(s): 35, 42, 74

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002294082	A2	20021009	JP 2001-99921	20010330
PRAI	JP 2001-99921		20010330		
AB	The emulsion comprises a dispersion of resin particles and colorants containing 0.01-100 phr (based on solid polymer particles) a defoaming agent. Thus, an emulsion was made by the polymerization of butoxymethylacrylamide, glycidyl methacrylate, isobornyl acrylate, and divinyl adipate in ion exchanged H2O containing di-Me polysiloxane and Orasol Red G.				
ST	colored acrylate copolymer emulsion polymn; printing in color filter adipate acrylamide copolymer emulsion; siloxane defoaming agent color emulsion				
IT	Antifoaming agents Ink-jet printing Optical filters (colored resin emulsion, ink-jet printing ink and color filter)				
IT	Polysiloxanes, uses RL: MOA (Modifier or additive use); USES (Uses) (defoaming agents, polymerization emulsion containing; colored resin emulsion, ink-jet printing ink and color filter)				
IT	Polymerization (emulsion; colored resin emulsion, ink-jet printing ink and color filter)				
IT	9016-00-6, Dimethylsiloxane homopolymer, sru 31900-57-9, Dimethylsilanediol homopolymer RL: MOA (Modifier or additive use); USES (Uses) (defoaming agents, polymerization emulsion containing; colored resin emulsion, ink-jet printing ink and color filter)				
IT	<b>334994-54-6P</b> , N-Butoxymethylacrylamide-divinyl adipate-glycidyl methacrylate copolymer <b>367909-62-4P</b> , N-Butoxymethylacrylamide-divinyl adipate-glycidyl methacrylate-isobornyl acrylate copolymer RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)				

(emulsion polymerization of, colorant and defoaming agent-containing; colored

resin emulsion, **ink-jet** printing ink and color filter)

IT 12271-00-0, Orasol Red G

RL: TEM (Technical or engineered material use); USES (Uses)

(polymerization emulsion containing; colored resin emulsion, ink-jet printing ink and color filter)

IT **334994-54-6P**, N-Butoxymethylacrylamide-divinyl adipate-glycidyl

methacrylate copolymer **367909-62-4P**, N-Butoxymethylacrylamide-divinyl adipate-glycidyl methacrylate-isobornyl acrylate copolymer

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(emulsion polymerization of, colorant and defoaming agent-containing; colored

resin emulsion, **ink-jet** printing ink and color filter)

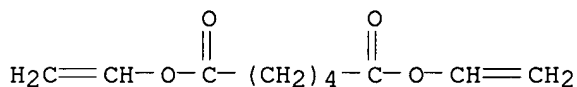
RN 334994-54-6 HCAPLUS

CN Hexanedioic acid, diethenyl ester, polymer with N-(butoxymethyl)-2-propenamide and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 4074-90-2

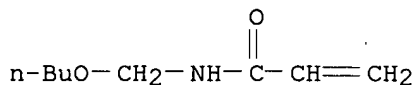
CMF C10 H14 O4



CM 2

CRN 1852-16-0

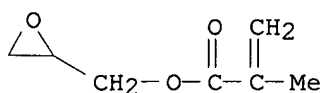
CMF C8 H15 N O2



CM 3

CRN 106-91-2

CMF C7 H10 O3



RN 367909-62-4 HCAPLUS

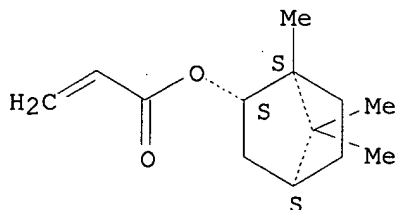
CN Hexanedioic acid, diethenyl ester, polymer with N-(butoxymethyl)-2-propenamide, oxiranylmethyl 2-methyl-2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 5888-33-5

CMF C13 H20 O2

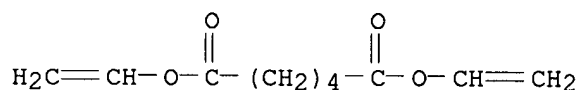
Relative stereochemistry.



CM 2

CRN 4074-90-2

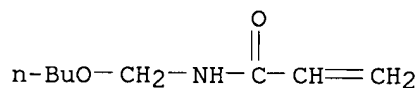
CMF C10 H14 O4



CM 3

CRN 1852-16-0

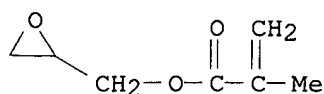
CMF C8 H15 N O2



CM 4

CRN 106-91-2

CMF C7 H10 O3



L8 ANSWER 6 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 2002:207617 HCAPLUS  
 DN 136:233693

TI Water- and rubbing-resistant radiation-curable water-thinned ink-jet ink compositions containing polyurethanes

IN Yamada, Yutaka; Tanaka, Shigehiro; Ojima, Osamu

PA Dainippon Ink and Chemicals, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D011-00

ICS B41J002-01; B41M005-00

CC 42-12 (Coatings, Inks, and Related Products)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002080767	A2	20020319	JP 2001-184866	20010619
PRAI	JP 2000-182942	A	20000619		

AB The compns. contain polyurethanes bearing radiation-curable unsatd. bonds at 1.0-4.0 equiv/kg and carboxyl groups, colorants, water-soluble organic solvents, and H<sub>2</sub>O. Thus, Placel L 205AL (lactone polyester diol), dimethylolpropionic acid, trimethylolpropane, butylethylpropanediol, polyethylene glycol, and 1,3-bis(isocyanatomethyl)cyclohexane were polymerized in a N-methylpyrrolidone-EtOAc-MEK mixture in the presence of stannous octylate, treated with NK Ester 701 (OH-containing methacrylate) in the presence of metoquinone, and neutralized with aqueous Et<sub>3</sub>N to give a polyurethane composition. A water-thinned jet ink containing the polyurethane, carbon black, surfactants, and Darocur 1173 (photoinitiator) showed good discharge stability and gave clear images with good adhesion to a PET film and resistance to rubbing and water.

ST water resistance jet ink polyurethane methacrylate; rubbing resistance jet ink polyurethane acrylate

IT Inks

(jet-printing, water-thinned, water-resistant; water- and rubbing-resistant radiation-curable water-thinned ink-jet inks containing polyurethane (meth)acrylates)

IT Polyurethanes, uses

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polyester-polyoxyalkylene-, (meth)acrylates; water- and rubbing-resistant radiation-curable water-thinned ink-jet inks containing polyurethane (meth)acrylates)

IT 121-44-8DP, Triethylamine, salts with carboxyl-containing polyurethane (meth)acrylates **1830-78-ODP**, NK Ester 701, reaction products with carboxyl-containing polyurethane, triethylamine salts 25248-42-4DP, Polycaprolactone, SRU, diol derivs., carboxyl-containing polyurethanes, reaction products with hydroxy-containing (meth)acrylates, triethylamine salts 184973-30-6DP, Viscoat 214HP, reaction products with carboxyl-containing polyurethane, triethylamine salts 223574-17-2DP, reaction products with hydroxy-containing (meth)acrylate, triethylamine salts 403664-27-7DP, reaction products with hydroxy-containing methacrylate, triethylamine salts  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

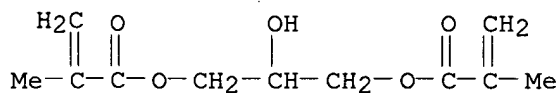
(water- and rubbing-resistant radiation-curable water-thinned ink-jet inks containing polyurethane (meth)acrylates)

IT **1830-78-ODP**, NK Ester 701, reaction products with carboxyl-containing polyurethane, triethylamine salts

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (water- and rubbing-resistant radiation-curable water-thinned  
**ink-jet** inks containing polyurethane (meth)acrylates)

RN 1830-78-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-1,3-propanediyl ester (9CI) (CA INDEX NAME)



L8 ANSWER 7 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:63337 HCAPLUS

DN 136:126592

TI Ink-jet printing sheet with porous ink receiving layer and its manufacture

IN Nakajima, Akihisa; Ueda, Eiichi; Kurachi, Ikuo

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM B41M005-00

ICS B41M005-00; B41J002-01

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002019278	A2	20020123	JP 2000-211277	20000712
PRAI	JP 2000-211277		20000712		

AB The printing sheet is manufactured by coating a porous ink receiving layer selected from (a) to (e) on a transparent substrate, gelled and dried; (a) poly(vinyl alc.) or its saponified product and polyhydroxy compound, (b) inorg. particles and water glass, (c) a hydrophilic resin, inorg. particles, and hydrophobic solvent with b.p.  $\geq 180^\circ$  and water solubility  $\leq 0.1$  g/100 mL, (d) a hydrophilic resin, inorg. particles, and water-soluble organic compd with b.p.  $\geq 250^\circ$ , m.p.  $\leq 20^\circ$ , and water solubility  $\geq 10$  g/100 mL, and (e) a

hydrophilic resin, inorg. particles, and latex dispersion polymerized in the presence of the inorg. particles. The manufactured printing sheets are also claimed. The sheet shows high gloss and a hollow ratio and less brittleness.

ST printing sheet porous ink receiving layer; polyvinyl alc polyhydroxy compd ink jet printing sheet; inorg particle water glass printing sheet; hydrophobic solvent latex printing sheet

IT Ink-jet recording sheets

(ink-jet printing sheet with porous ink receiving layer)

IT 123-95-5, Butyl stearate

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(hydrophobic solvent; ink-jet printing sheet with porous ink receiving layer)

IT 149-91-7, Gallic acid, uses 1344-09-8, Sodium silicate 25618-55-7,

Polyglycerin 252287-02-8 390400-87-0 390400-88-1 390400-89-2

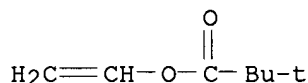
RL: MOA (Modifier or additive use); TEM (Technical or engineered material

use); USES (Uses)  
 (ink-jet printing sheet with porous ink receiving layer)  
 IT 25232-36-4P, Vinyl acetate-vinyl pivalate copolymer  
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (ink-jet printing sheet with porous ink receiving  
 layer)  
 IT 7631-86-9, Silica, uses 9002-89-5, Poly(vinyl alcohol) 10257-55-3,  
 Calcium sulfite 109720-01-6, Borax-vinyl alcohol copolymer  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ink-jet printing sheet with porous ink receiving layer)  
 IT 25232-36-4P, Vinyl acetate-vinyl pivalate copolymer  
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (ink-jet printing sheet with porous ink receiving  
 layer)  
 RN 25232-36-4 HCAPLUS  
 CN Propanoic acid, 2,2-dimethyl-, ethenyl ester, polymer with ethenyl acetate  
 (9CI) (CA INDEX NAME)

CM 1

CRN 3377-92-2

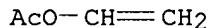
CMF C7 H12 O2



CM 2

CRN 108-05-4

CMF C4 H6 O2



L8 ANSWER 8 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 2001:738229 HCAPLUS  
 DN 135:296210  
 TI Cationic latex and binder composition for ink jet recording sheet  
 IN Otsuka, Masahiko; Kosako, Isao  
 PA Asahi Chemical Industry Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 13 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM B41M005-00  
 ICS B41J002-01; C08F271-00; C08F285-00  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other  
 Reprographic Processes)  
 Section cross-reference(s): 38  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001277710	A2	20011010	JP 2000-101109	20000403
PRAI	JP 2000-101109		20000403		

AB The latex contains a copolymer obtained by polymerizing 100 parts of a composition containing (A) a radically polymerizable monomer with a tertiary amino and/or a quaternary ammonium and (B) a monomer radically polymerizable with them in the presence of 0.5-10 parts of  $\geq 1$  of poly(vinylpyrrolidone), polyacrylamide, poly(ethylene imine), poly(vinylpyridine), and their copolymer. The binder composition comprises the obtained cationic latex and an inorg. filler. The latex and the binder provide improved ink absorbency, improved water resistance, lightfastness, and d. of images, and no reduction of an ink receiving layer strength.

ST ink jet printing sheet cationic latex binder; inorg filler ink jet printing sheet

IT Binders  
Ink-jet recording sheets  
(cationic latex binder for ink-jet printing sheet)

IT 26949-20-2P,  $\gamma$ -Methacryloxypropyltrimethoxysilane-styrene copolymer  
84154-41-6P, Butyl acrylate- $\gamma$ -methacryloxypropyltrimethoxysilane-methyl methacrylate-styrene copolymer 113442-23-2P  
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(cationic latex binder for ink-jet printing sheet)

IT 7631-86-9, Finesil X 37, uses 9002-98-6 9003-47-8, Polyvinylpyridine  
**26124-21-0**, Collacral VL 26161-33-1, Sanfloc C 009P  
RL: TEM (Technical or engineered material use); USES (Uses)  
(cationic latex binder for **ink-jet** printing sheet)

IT **26124-21-0**, Collacral VL  
RL: TEM (Technical or engineered material use); USES (Uses)  
(cationic latex binder for **ink-jet** printing sheet)

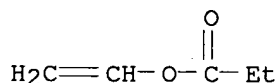
RN 26124-21-0 HCAPLUS

CN Propanoic acid, ethenyl ester, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 105-38-4

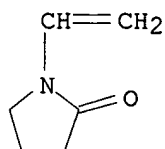
CMF C5 H8 O2



CM 2

CRN 88-12-0

CMF C6 H9 N O



L8 ANSWER 9 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 2001:372253 HCAPLUS  
 DN 135:6998  
 TI Anticlogging storage-stable oil-based inks for electrostatic ink-jet printing  
 IN Kato, Eiichi  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 50 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D011-00  
 ICS B41J002-01; B41M005-00; C08F002-20; C08F290-04; B41C001-10  
 CC 42-12 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 74  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001139859	A2	20010522	JP 2000-261059	20000830
PRAI	JP 1999-243343	A	19990830		

AB The inks contain elec. charged polymer particles prepared from (A)  $\geq 1$  nonaq. solvent-soluble monofunctional monomers whose polymers are insol. in the nonaq. solvents, (B)  $\geq 1$  macromonomer ( $M_w \leq 2 + 104$ ) bearing structural repeating units having F and/or Si-containing substituents and polymerizable terminal group, and (C)  $\geq 1$  nonaq. solvent-soluble star-block copolymer dispersants ( $M_w 2 + 104 - 1 + 106$ ) bearing specific structures linked with  $\geq 3$  organic residual groups in a nonaq. medium having elec. resistance  $\geq 10^9 \Omega\text{-cm}$  and dielec. constant  $\leq 3.5$ . Thus, vinyl acetate was polymerized with  $\text{H}_2\text{C}=\text{CH}-p-\text{C}_6\text{H}_4\text{CO}_2(\text{CH}_2)_2\text{S}[\text{CH}_2\text{CHCO}_2(\text{CH}_2)_2\text{CO}_2(\text{CH}_2)_2(\text{CF}_2)_4\text{CF}(\text{CF}_3)_2]_n$  ( $M_w$  7000-9000) in the presence of Me methacrylate-Me acrylate-stearyl methacrylate star-block copolymer in Isopar H (isoalkanes) to give particles, which were formulated into an ink for lithog. printing giving good printed images.

ST storage stable lithog printing ink; jet printing ink electrostatic polymer dispersion; star block polyacrylate dispersant ink; vinyl acetate macromonomer graft copolymer ink

IT Macromonomers  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)

IT Polysiloxanes, uses  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (graft polymers; anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)

IT Inks  
 (jet-printing; anticlogging storage-stable oil-based inks for

electrostatic ink-jet printing)

IT Inks  
(lithog.; anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)

IT Dispersing agents  
(polymeric, star-block; anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)

IT 311807-07-5P 311807-08-6P 311807-09-7P 311807-10-0P 311807-11-1P  
311807-13-3P 311807-16-6P 311807-18-8P 311807-19-9P 311807-22-4P  
311807-40-6P 311807-41-7P 311807-42-8P 311807-43-9P 311807-44-0P  
340756-53-8P 340756-54-9P 340756-55-0P 340756-56-1P 340756-57-2P  
340756-58-3P 340756-59-4P 340756-60-7P 340756-61-8P 340756-62-9P  
340756-63-0P 340756-64-1P 340756-65-2P 340756-66-3P 340756-67-4P  
340756-68-5P 340756-69-6P 340756-71-0P  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)

IT 149434-03-7P 311807-05-3DP, methacrylate group-terminated 312260-55-2P  
312260-57-4P 312260-79-0P 312260-82-5P 312260-85-8P 312260-87-0P  
312260-89-2P 312260-91-6P 312260-93-8P 312260-96-1P 312261-02-2P  
312261-17-9P 312261-21-5P 312261-24-8P 312261-27-1P 312261-30-6P  
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(macromonomers; anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)

IT 150469-59-3P, 3-Methylacrylic acid-stearyl methacrylate-vinyl acetate block copolymer 159967-35-8P, Ethyl acrylate-methyl methacrylate-dodecyl methacrylate block copolymer 159967-36-9P, Methyl acrylate-methyl methacrylate-stearyl methacrylate block copolymer 159967-45-0P, Dodecyl acrylate-4-methylstyrene-stearyl methacrylate-styrene block copolymer 159967-47-2P 159967-48-3P, Acrylic acid-benzyl methacrylate-eicosyl methacrylate block copolymer 159967-49-4P 159967-50-7P 159967-51-8P, 2-(N,N-Dimethylamino)ethyl methacrylate-ethyl acrylate-methyl methacrylate-tetradecyl methacrylate-stearyl acrylate block copolymer 159967-53-0P 159967-54-1P, Acrylonitrile-decyl methacrylate-ethyl acrylate-methyl methacrylate-stearyl acrylate block copolymer 159967-55-2P, N,N-Dimethylacrylamide-ethyl methacrylate-stearyl methacrylate block copolymer 159967-56-3P, 4-Hydroxystyrene-styrene-tetradecyl methacrylate block copolymer **340756-72-1P**  
**340756-73-2P**  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
(star-block, dispersants; anticlogging storage-stable oil-based inks for electrostatic **ink-jet** printing)

IT **340756-72-1P 340756-73-2P**  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
(star-block, dispersants; anticlogging storage-stable oil-based inks for electrostatic **ink-jet** printing)

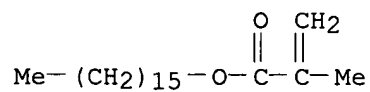
RN 340756-72-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, hexadecyl ester, polymer with ethenyl propanoate and methyl 2-propanoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 2495-27-4

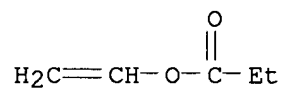
CMF C20 H38 O2



CM 2

CRN 105-38-4

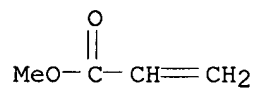
CMF C5 H8 O2



CM 3

CRN 96-33-3

CMF C4 H6 O2



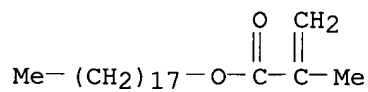
RN 340756-73-2 HCAPLUS

CN Undecanoic acid, ethenyl ester, polymer with ethenyl acetate, methoxyethene and octadecyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 32360-05-7

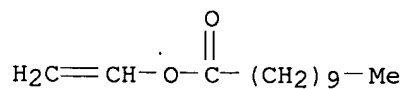
CMF C22 H42 O2



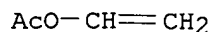
CM 2

CRN 20690-63-5

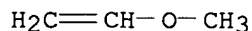
CMF C13 H24 O2



CM 3

CRN 108-05-4  
CMF C4 H6 O2

CM 4

CRN 107-25-5  
CMF C3 H6 O

L8 ANSWER 10 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 2001:372252 HCAPLUS  
 DN 135:6997  
 TI Anticlogging storage-stable oil-based inks for electrostatic ink-jet printing  
 IN Kato, Eiichi  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 48 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D011-00  
 ICS B41J002-01; B41M005-00; C08F290-04  
 CC 42-12 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 74  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001139858	A2	20010522	JP 2000-257621	20000828
PRAI	JP 1999-242032	A	19990827		

AB The inks contain elec. charged polymer particles prepared from (A)  $\geq 1$  nonaq. solvent-soluble monofunctional monomers whose polymers are insol. in the nonaq. solvents, (B)  $\geq 1$  monofunctional monomer bearing NR<sub>1</sub>R<sub>2</sub> (R<sub>1</sub>, R<sub>2</sub> = H, C<sub>1</sub>-22 hydrocarbyl) groups, (C)  $\geq 1$  monofunctional monomer bearing SO<sub>3</sub>H and/or SO<sub>2</sub>H groups, (D)  $\geq 1$  macromonomer (M<sub>w</sub>  $\leq 2 + 104$ ) bearing specific structural repeating units and one polymerizable terminal group, and (E)  $\geq 1$  nonaq. solvent-soluble partially crosslinked polymer dispersants in a nonaq. medium having elec. resistance  $\geq 109 \Omega\text{-cm}$  and dielec. constant  $\leq 3.5$ . Thus, vinyl acetate was polymerized with 2-(N,N-diethylamino)ethyl crotonate, 3-sulfopropyl crotonate, 3-mercaptopropionic acid-octadecyl methacrylate telomer ester with glycidyl methacrylate in the presence of octadecyl methacrylate-divinylbenzene copolymer dispersant in Isopar H (isoalkanes) to give particles, which were formulated into an ink for lithog. printing giving good printed images.

ST storage stable lithog printing ink; polymeric dispersant oil based ink;

- macromonomer graft copolymer jet printing ink
- IT Polyoxyalkylenes, uses  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
 (acrylic, dispersants; anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)
- IT Macromonomers  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)
- IT Inks  
 (jet-printing; anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)
- IT Inks  
 (lithog.; anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)
- IT Dispersing agents  
 (polymeric; anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)
- IT 5926-95-4DP, Glutaconic anhydride, reaction products with amino-containing octadecyl methacrylate-divinylbenzene copolymer  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
 (anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)
- IT 80-62-6DP, Methyl methacrylate, polymers with (meth)acrylates, reactive dispersants, and macromers 96-33-3DP, Methyl acrylate, polymers with (meth)acrylates, reactive dispersants, and macromers 105-16-8DP, polymers with (meth)acrylates, reactive dispersants, and macromers 140-88-5DP, Ethyl acrylate, polymers with (meth)acrylates, reactive dispersants, and macromers 50985-35-8DP, polymers with (meth)acrylates, reactive dispersants, and macromers 214835-07-1DP, polymers with (meth)acrylates and reactive dispersants 218459-73-5DP, polymers with (meth)acrylates and macromers 340810-96-0P 340810-97-1P 340810-98-2P 340810-99-3P 340811-00-9P 340811-01-0P 340816-08-2P 340816-10-6P 340816-11-7P 340816-12-8P 340816-13-9P 340816-14-0P 340816-15-1P 340816-16-2P 340816-17-3P 340816-18-4P 340816-20-8P 340816-22-0P 340816-24-2P  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)
- IT 218459-77-9DP, Ethylene glycol diacrylate-octadecyl acrylate copolymer, methacrylate group-terminated, optionally polymer with (meth)acrylates and macromers  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (dispersants or inks; anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)
- IT 61255-17-2P, Divinylbenzene-dodecyl methacrylate copolymer 122324-74-7P, Divinylbenzene-octadecyl methacrylate copolymer 130805-26-4P, Divinylbenzene-hexadecyl methacrylate copolymer 139703-31-4P 139703-33-6P 139720-57-3P 139720-59-5P 139720-60-8P 139720-61-9P 139720-62-0P 139720-63-1P 139720-64-2DP, reaction products with glutaconic anhydride 141181-86-4P 148532-67-6P, Dodecyl methacrylate-octyl methacrylate-trivinylbenzene copolymer 148532-68-7P,

Butyl methacrylate-ethylene glycol dimethacrylate-octadecyl methacrylate copolymer 148532-76-7P **148532-82-5P** 159291-22-2P  
 159291-24-4P 215672-71-2P 308283-76-3P, Docosyl methacrylate-polyethylene glycol diacrylate copolymer 324529-94-4P, Ethylene glycol diacrylate-hexadecyl methacrylate copolymer

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(dispersants; anticlogging storage-stable oil-based inks for electrostatic **ink-jet** printing)

IT 148640-01-1P 159446-39-6P 159446-41-0P 159446-42-1P 159446-44-3P  
 159446-45-4P 159446-48-7P 214772-24-4P 214772-26-6P 214772-29-9P  
 218459-53-1P 218459-59-7P 218459-61-1P **218459-65-5P**  
 218459-67-7P 218459-70-2P 218459-72-4P 218459-73-5P 218459-74-6P  
 218459-75-7P 218459-76-8P 324574-60-9P 324574-61-0P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(dispersants; anticlogging storage-stable oil-based inks for electrostatic **ink-jet** printing)

IT 138005-14-8DP, 2,3-Dihexanoyloxypropyl methacrylate homopolymer, methacrylate-terminated, optionally polymers with (meth)acrylates and reactive dispersants  
 RL: IMF (Industrial manufacture); PRP (Properties); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(macromonomer or ink; anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)

IT 139104-87-3P 139104-90-8P 139105-03-6P 139105-08-1P 139105-12-7P  
 141414-84-8P 141414-99-5P 141415-72-7P 214834-98-7P 214835-07-1P  
 215877-54-6P 215877-61-5P 215877-71-7P 217076-83-0P 333362-05-3P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(macromonomer; anticlogging storage-stable oil-based inks for electrostatic ink-jet printing)

IT **148532-82-5P**

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(dispersants; anticlogging storage-stable oil-based inks for electrostatic **ink-jet** printing)

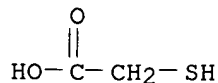
RN 148532-82-5 HCAPLUS

CN Hexanedioic acid, diethenyl ester, telomer with hexadecyl 2-methyl-2-propenoate and mercaptoacetic acid (9CI) (CA INDEX NAME)

CM 1

CRN 68-11-1

CMF C2 H4 O2 S



CM 2

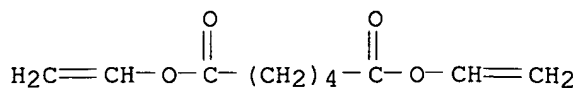
CRN 148532-81-4

CMF (C20 H38 O2 . C10 H14 O4)x

CCI PMS

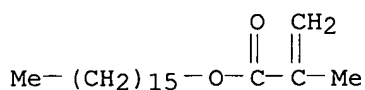
CM 3

CRN 4074-90-2  
CMF C10 H14 O4



CM 4

CRN 2495-27-4  
CMF C20 H38 O2



IT **218459-65-5P**

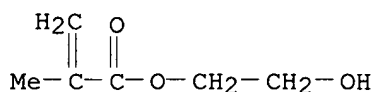
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (dispersants; anticlogging storage-stable oil-based inks for electrostatic **ink-jet** printing)

RN 218459-65-5 HCAPLUS

CN Hexanedioic acid, diethenyl ester, telomer with butyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate and mercaptoacetic acid, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9  
CMF C6 H10 O3

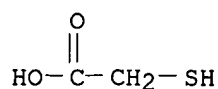


CM 2

CRN 218459-64-4  
CMF (C16 H30 O2 . C10 H14 O4 . C8 H14 O2)x . C2 H4 O2 S

CM 3

CRN 68-11-1  
CMF C2 H4 O2 S

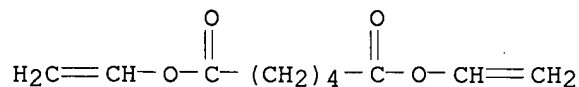


CM 4

CRN 218459-63-3  
CMF (C16 H30 O2 . C10 H14 O4 . C8 H14 O2)x  
CCI PMS

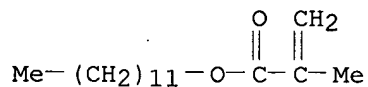
CM 5

CRN 4074-90-2  
CMF C10 H14 O4



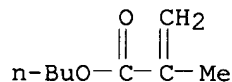
CM 6

CRN 142-90-5  
CMF C16 H30 O2



CM 7

CRN 97-88-1  
CMF C8 H14 O2



L8 ANSWER 11 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
AN 2001:371617 HCAPLUS  
DN 135:6996  
TI Oil-based inks with good deliverability and image-forming properties for electrostatic ink-jet printing  
IN Kato, Eiichi  
PA Fuji Photo Film Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 48 pp.  
CODEN: JKXXAF  
DT Patent

LA Japanese  
 IC ICM C09D011-00  
 ICS B41J002-01; B41M005-00  
 CC 42-12 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 74

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001139860	A2	20010522	JP 2000-261060	20000830
PRAI	JP 1999-246120	A	19990831		
AB	The inks dispersed in a nonaq. medium having elec. resistance $\geq 10^9$ $\Omega$ -cm and dielec. constant $\leq 3.5$ contain resin particles manufactured by polymerizing solns. containing (A) $\geq 1$ nonaq. solvent-soluble monofunctional monomers which become insol. in the nonaq. solvents after being polymerized, (B) $\geq 1$ macromonomers ( $M_w \leq 2 \times 10^4$ ) having repeating units containing fluoro and/or silyl groups and terminated at one end with polymerizable double bond, and (C) $\geq 1$ partially crosslinked and nonaq. solvent-soluble polymeric dispersion stabilizers. Thus, vinyl acetate was polymerized with Silaplane FM 0721 (methacrylate- and trimethylsilyl-terminated polydimethylsiloxane) in the presence of octadecyl methacrylate-divinylbenzene copolymer in Isopar H (isoalkanes) and filtered to give particles, which was dispersed with alkali blue dispersion in Isopar E (isoalkane) to give an ink.				
ST	oil based ink polysiloxane graft deliverability; jet printing ink electrostatic polysiloxane dispersion; vinylbenzene octadecyl methacrylate dispersant polysiloxane ink; vinyl acetate polydimethylsiloxane macromonomer graft ink				
IT	Polysiloxanes, uses RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (graft polymers, acrylic; oil-based inks with good deliverability and image-forming properties for electrostatic ink-jet printing)				
IT	Inks (jet-printing; oil-based inks with good deliverability and image-forming properties for electrostatic ink-jet printing)				
IT	Inks (lithog.; oil-based inks with good deliverability and image-forming properties for electrostatic ink-jet printing)				
IT	Telomers (polymers) RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (oil-based inks with good deliverability and image-forming properties for electrostatic ink-jet printing)				
IT	Inks (oil-based; oil-based inks with good deliverability and image-forming properties for electrostatic ink-jet printing)				
IT	Dispersing agents (reactive, macromer; oil-based inks with good deliverability and image-forming properties for electrostatic ink-jet printing)				
IT	61255-17-2P, Divinylbenzene-dodecyl methacrylate copolymer 122324-74-7P, Divinylbenzene-octadecyl methacrylate copolymer 130805-26-4P, Divinylbenzene-hexadecyl methacrylate copolymer 148532-67-6P, Dodecyl methacrylate-octyl methacrylate-trivinylbenzene copolymer 148532-68-7P, Butyl methacrylate-ethylene glycol dimethacrylate-octadecyl methacrylate copolymer 148640-01-1P, Divinylbenzene-octadecyl methacrylate-thioglycolic acid telomer ester with 2-hydroxyethyl methacrylate 159446-39-6P, Divinylbenzene-octadecyl methacrylate-2-mercaptoethanol telomer ester with 10-carboxyldecylacrylamide 159446-41-0P				

159446-42-1P, Divinylbenzene-octadecyl methacrylate-2-mercaptoethanol telomer ester with 4-vinylbenzenecarboxylic acid 159446-44-3P, Divinylbenzene-octadecyl methacrylate-2-mercaptoethanol telomer ester with vinylacetic acid 159446-45-4P, Divinylbenzene-octadecyl methacrylate-2-mercaptoethanol telomer ester with methacrylic acid 159446-48-7P, Divinylbenzene-octadecyl methacrylate-2-mercaptoethanol telomer ester with acrylic acid 214772-24-4P, Divinylbenzene-octadecyl methacrylate-2-mercaptoethanol telomer ester with 2-carboxyethyl acrylate 214772-26-6P, Divinylbenzene-octadecyl methacrylate-2-mercaptoethanol telomer ester with  $\alpha$ -chloroacrylic acid 214772-29-9P, Divinylbenzene-octadecyl methacrylate-2-mercaptoethanol telomer ester with 2-(2-carboxyethylcarbonyloxy)ethyl cyanoacrylate 218459-53-1P, Allyl methacrylate-dodecyl methacrylate-thioglycolic acid telomer ester with 2-hydroxyethyl methacrylate 218459-59-7P, Ethylene glycol dimethacrylate-octadecyl methacrylate-thioglycolic acid telomer ester with 2-hydroxyethyl methacrylate 218459-61-1P, Hexadecyl methacrylate-propylene glycol dimethacrylate-thioglycolic acid telomer ester with 2-hydroxyethyl methacrylate **218459-65-5P**, Butyl methacrylate-divinyl adipate-dodecyl methacrylate-thioglycolic acid telomer ester with 2-hydroxyethyl methacrylate 218459-67-7P, Ethylene glycol diacrylate-methyl methacrylate-octadecyl methacrylate-thioglycolic acid telomer ester with 2-hydroxyethyl methacrylate 218459-72-4P, Divinylbenzene-styrene-tetradecyl methacrylate-thioglycolic acid telomer ester with 2-hydroxyethyl methacrylate 324529-94-4P, Ethylene glycol diacrylate-hexadecyl methacrylate copolymer 324574-61-0P 341506-19-2P  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(dispersant; oil-based inks with good deliverability and image-forming properties for electrostatic **ink-jet** printing)

IT 139703-31-4P, Divinylbenzene-Octadecyl methacrylate-thioglycolic acid telomer 139703-33-6P, Divinylbenzene-tridecyl methacrylate-thioglycolic acid telomer 139720-57-3P, Divinylbenzene-Octadecyl methacrylate-3-thiopropionic acid telomer 139720-59-5P 139720-60-8P 139720-61-9P 139720-62-0P 139720-63-1P 139720-64-2P, Octadecyl methacrylate-divinylbenzene-2-mercaptoethylamine telomer 141181-86-4P, Divinylbenzene-dodecyl methacrylate-thioglycolic acid telomer 148532-76-7P, Octadecyl methacrylate-butyl methacrylate-ethylene glycol dimethacrylate-thioglycolic acid telomer **148532-82-5P**, Hexadecyl methacrylate-divinyl adipate-thioglycolic acid telomer 159291-22-2P, Trivinylbenzene-dodecyl methacrylate-octyl methacrylate-thioglycolic acid telomer 159291-24-4P 215672-71-2P 308283-76-3P, Docosyl methacrylate-polyethylene glycol diacrylate copolymer  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(oil-based inks with good deliverability and image-forming properties for electrostatic **ink-jet** printing)

IT 80-62-6DP, polymers with (meth)acrylates 96-33-3DP, polymers with (meth)acrylates 106-91-2DP, polymers with (meth)acrylates 2867-47-2DP, polymers with (meth)acrylates 7582-21-0DP, polymers with (meth)acrylates 80730-17-2DP, polymers with (meth)acrylates 152792-47-7DP, polymers with (meth)acrylates 169045-89-0P 305814-07-7DP, polymers with (meth)acrylates 305814-10-2DP, polymers with (meth)acrylates 308278-98-0DP, polymers with (meth)acrylates 311807-05-3DP, polymers with (meth)acrylates 311807-06-4P, Silaplane FM 0721-vinyl acetate graft copolymer 340756-70-9DP, polymers with (meth)acrylates 341031-29-6P 341031-31-0P 341031-32-1P 341031-33-2P 341031-35-4P 341031-36-5P 341031-38-7P 341031-39-8P 341031-40-1P 341031-41-2P 341031-42-3P 341031-43-4P 341031-44-5P 341031-45-6P 341031-46-7P 341505-86-0P

341505-91-7P 341505-93-9P 341505-94-0P 341505-95-1P 341505-96-2P  
 341505-98-4P 341506-00-1P 341506-01-2P 341506-30-7P 341506-35-2P  
 341506-44-3P **341506-46-5P** 341506-51-2P 341506-56-7P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (oil-based inks with good deliverability and image-forming properties for electrostatic **ink-jet** printing)

IT **218459-65-5P**, Butyl methacrylate-divinyl adipate-dodecyl methacrylate-thioglycolic acid telomer ester with 2-hydroxyethyl methacrylate  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
 (dispersant; oil-based inks with good deliverability and image-forming properties for electrostatic **ink-jet** printing)

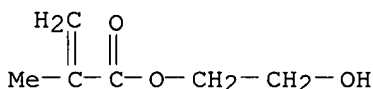
RN 218459-65-5 HCAPLUS

CN Hexanedioic acid, diethenyl ester, telomer with butyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate and mercaptoacetic acid, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9

CMF C6 H10 O3



CM 2

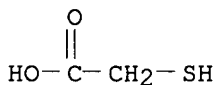
CRN 218459-64-4

CMF (C16 H30 O2 . C10 H14 O4 . C8 H14 O2)x . C2 H4 O2 S

CM 3

CRN 68-11-1

CMF C2 H4 O2 S



CM 4

CRN 218459-63-3

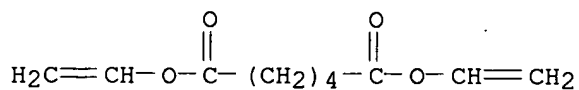
CMF (C16 H30 O2 . C10 H14 O4 . C8 H14 O2)x

CCI PMS

CM 5

CRN 4074-90-2

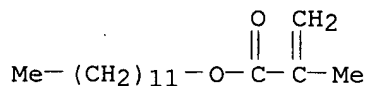
CMF C10 H14 O4



CM 6

CRN 142-90-5

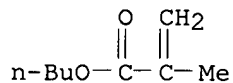
CMF C16 H30 O2



CM 7

CRN 97-88-1

CMF C8 H14 O2

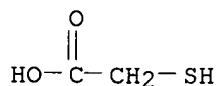


IT **148532-82-5P**, Hexadecyl methacrylate-divinyl adipate-thioglycolic acid telomer  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
 (oil-based inks with good deliverability and image-forming properties for electrostatic **ink-jet** printing)  
 RN 148532-82-5 HCAPLUS  
 CN Hexanedioic acid, diethenyl ester, telomer with hexadecyl 2-methyl-2-propenoate and mercaptoacetic acid (9CI) (CA INDEX NAME)

CM 1

CRN 68-11-1

CMF C2 H4 O2 S



CM 2

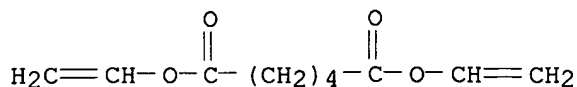
CRN 148532-81-4

CMF (C20 H38 O2 . C10 H14 O4)x

CCI PMS

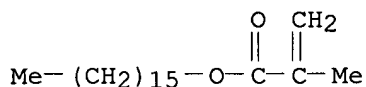
CM 3

CRN 4074-90-2  
CMF C10 H14 O4



CM 4

CRN 2495-27-4  
CMF C20 H38 O2



IT 341506-46-5P

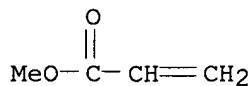
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(oil-based inks with good deliverability and image-forming properties for electrostatic **ink-jet** printing)

RN 341506-46-5 HCAPLUS

CN Hexanedioic acid, diethenyl ester, telomer with butyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate and mercaptoacetic acid, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 3-[1,1,3,5,5,5-hexamethyl-3-(2,2,2-trifluoroethyl)trisiloxanyl]propyl 2-methyl-2-propenoate telomer with 3-mercaptopropanoic acid 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, methyl 2-methyl-2-propenoate, methyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

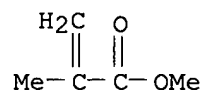
CM 1

CRN 96-33-3  
CMF C4 H6 O2



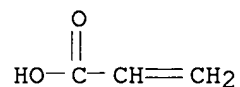
CM 2

CRN 80-62-6  
CMF C5 H8 O2



CM 3

CRN 79-10-7  
CMF C3 H4 O2

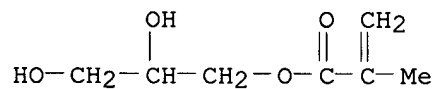


CM 4

CRN 312261-02-2  
CMF (C15 H31 F3 O4 Si3)x . x C7 H12 O4 . C3 H6 O2 S

CM 5

CRN 5919-74-4  
CMF C7 H12 O4

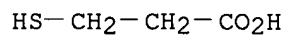


CM 6

CRN 312261-01-1  
CMF (C15 H31 F3 O4 Si3)x . C3 H6 O2 S

CM 7

CRN 107-96-0  
CMF C3 H6 O2 S

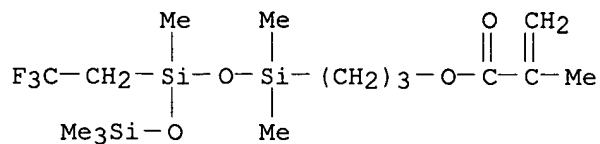


CM 8

CRN 312261-00-0  
CMF (C15 H31 F3 O4 Si3)x  
CCI PMS

CM 9

CRN 308278-77-5  
CMF C15 H31 F3 O4 Si3

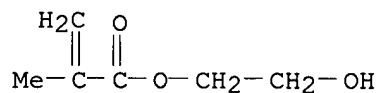


CM 10

CRN 218459-65-5  
CMF (C16 H30 O2 . C10 H14 O4 . C8 H14 O2)x . x C6 H10 O3 . C2 H4 O2 S

CM 11

CRN 868-77-9  
CMF C6 H10 O3

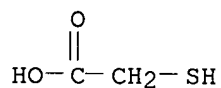


CM 12

CRN 218459-64-4  
CMF (C16 H30 O2 . C10 H14 O4 . C8 H14 O2)x . C2 H4 O2 S

CM 13

CRN 68-11-1  
CMF C2 H4 O2 S

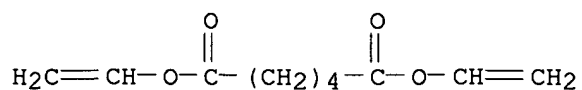


CM 14

CRN 218459-63-3  
CMF (C16 H30 O2 . C10 H14 O4 . C8 H14 O2)x  
CCI PMS

CM 15

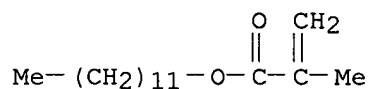
CRN 4074-90-2  
CMF C10 H14 O4



CM 16

CRN 142-90-5

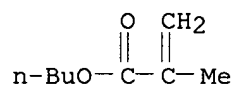
CMF C16 H30 O2



CM 17

CRN 97-88-1

CMF C8 H14 O2



L8 ANSWER 12 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:369774 HCAPLUS

DN 134:368385

TI Oil-based ink for electrostatic ink-jet printing

IN Kato, Eiichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 40 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D011-00

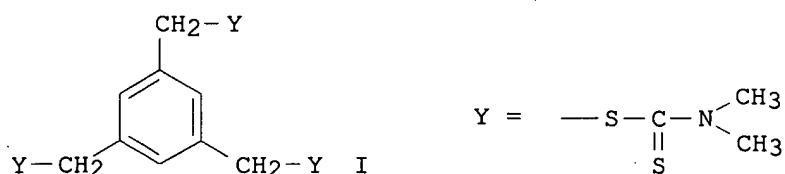
ICS B41J002-01; B41M005-00

CC 42-12 (Coatings, Inks, and Related Products)

Section cross-reference(s): 35, 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001139861	A2	20010522	JP 2000-261752	20000830
PRAI	JP 1999-243344	A	19990830		
GI					



- AB The ink, showing stable extrusion from an outlet of an electrostatic ink jet printer, contains charged resin particles dispersed in a nonaq. liquid medium with elec. resistivity  $\geq 109 \Omega\text{-cm}$  and dielec. coefficient  $\leq 3.5$ . The particles are those prepared by polymerization granulation of  $\geq 1$  nonaq. medium-soluble monofunctional monomers giving nonaq. medium-insol. polymers and  $\geq 1$  monomers substituted with F- and/or Si-containing groups, which are polymerizable with the above monomers, in the presence of a nonaq. medium-soluble polymer as dispersion stabilizer. The dispersion-stabilizing polymer with mass-average mol. weight  $2 + 104\text{-}1 + 106$  is a star-shaped block copolymer involving  $\geq 3$  AB segments linked to an organic group residue wherein 1 end of the A segment is linked to an organic residue. The A segment in the dispersion-stabilizing polymer has  $\geq 1$  polymer components corresponding to the medium-soluble 1st monomers for the charged resin particles and  $\geq 1$  polymer component substituted with  $\geq 1$  polar groups selected from phosphono, carboxyl, sulfo, OH, formyl, amino, P(O)(OH)E1 (E1 = hydrocarbyl, hydrocarbyloxy), CONE3E4, SO2NE3E4 (E3, E4 = H, hydrocarbyl), and cyclic acid anhydride-containing group. The B segment involves [CHb1Cb2(X1Y1)] [X1 = CO2, OCO, (CH2)xCO2, (CH2)xOCO, O; x = 1-3; Y1 = C $\geq$ 8 aliphatic group; b1, b2 = H, halogen, cyano, C1-7 hydrocarbyl; CO2, Z1, CO2Z1; Z1 = C1-22 hydrocarbyl]. Thus, 98.5 g vinyl acetate and 1.5 g CH2:CMecO2CH2C6F13 were polymerized in the presence of star-shaped 15:15:70 Me methacrylate-Me acrylate-stearyl methacrylate block copolymer initiated with trifunctional organic compound I in a mixture of EtOH and Isopar H using 2,2'-azobis(isovaleronitrile) and AIBN at 80° for 4 h to give polymer particles, 50 g of which were dispersed in a blue paraffin oil (Shellsol 71)-based medium to give the jet-printing ink.
- ST electrostatic jet printing ink charged particle; dispersion nonaq liq medium printing ink; polymn granulation dispersion stabilizer block copolymer; star shaped block copolymer dispersion stabilizer; methyl methacrylate star shaped block copolymer; stearyl methacrylate star shaped block copolymer; vinyl acetate fluorohexyl acrylate copolymer particle; stable dispersion electrostatic jet printing ink
- IT Polymers, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (block; oil-based ink for electrostatic ink-jet printing containing charged particles prepared in presence of star-shaped block copolymer dispersion stabilizer)
- IT Inks  
 (jet-printing; oil-based ink for electrostatic ink-jet printing containing charged particles prepared in presence of star-shaped block copolymer dispersion stabilizer)
- IT Inks  
 (oil-based; oil-based ink for electrostatic ink-jet printing containing charged particles prepared in presence of star-shaped block copolymer dispersion stabilizer)
- IT Disperse systems  
 (stabilizers; oil-based ink for electrostatic ink-jet printing containing

charged particles prepared in presence of star-shaped block copolymer dispersion stabilizer)

IT 308278-63-9P 339986-32-2P 339986-33-3P 339986-34-4P 339986-35-5P  
 339986-36-6P 339986-37-7P 339986-38-8P 339986-39-9P 339986-40-2P  
 339986-41-3P 339986-42-4P 339986-43-5P 339986-44-6P 339986-45-7P  
 339986-46-8P 339986-47-9P 339986-48-0P 339986-49-1P 339986-50-4P  
 339986-51-5P 339986-52-6P 339986-53-7P 339986-54-8P 339986-56-0P  
 339986-57-1P 339986-58-2P 339986-59-3P 339986-60-6P 339986-61-7P  
 339986-62-8P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(oil-based ink for electrostatic ink-jet printing containing charged particles prepared in presence of star-shaped block copolymer dispersion stabilizer)

IT 150551-83-0 150551-89-6 150551-92-1 150551-93-2 150551-97-6  
 154340-06-4 155293-25-7 159967-38-1 159967-39-2 159967-40-5  
 159967-41-6 159967-42-7 159967-43-8 159967-44-9

RL: CAT (Catalyst use); USES (Uses)

(polymerization initiator; oil-based ink for electrostatic ink-jet printing containing charged particles prepared in presence of star-shaped block copolymer dispersion stabilizer)

IT 150469-59-3P 159967-35-8P 159967-36-9P, Methyl acrylate-methyl methacrylate-stearyl methacrylate block copolymer 159967-45-0P  
**159967-46-1P** 159967-47-2P 159967-48-3P 159967-49-4P  
 159967-50-7P 159967-51-8P **159967-52-9P** 159967-53-0P  
 159967-54-1P 159967-55-2P 159967-56-3P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(star-shaped; oil-based ink for electrostatic **ink-jet** printing containing charged particles prepared in presence of star-shaped block copolymer dispersion stabilizer)

IT **159967-46-1P 159967-52-9P**

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(star-shaped; oil-based ink for electrostatic **ink-jet** printing containing charged particles prepared in presence of star-shaped block copolymer dispersion stabilizer)

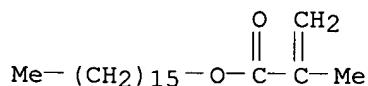
RN 159967-46-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, hexadecyl ester, polymer with ethenyl acetate and ethenyl propanoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 2495-27-4

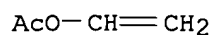
CMF C20 H38 O2



CM 2

CRN 108-05-4

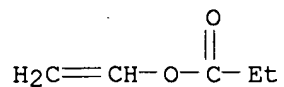
CMF C4 H6 O2



CM 3

CRN 105-38-4

CMF C5 H8 O2



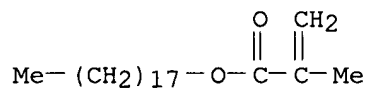
RN 159967-52-9 HCAPLUS

CN Dodecanoic acid, ethenyl ester, polymer with ethenyl acetate, methoxyethene and octadecyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 32360-05-7

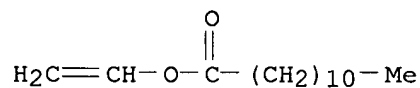
CMF C22 H42 O2



CM 2

CRN 2146-71-6

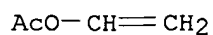
CMF C14 H26 O2



CM 3

CRN 108-05-4

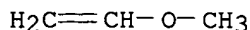
CMF C4 H6 O2



CM 4

CRN 107-25-5

CMF C3 H6 O



L8 ANSWER 13 OF '52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 2001:366144 HCAPLUS  
 DN 135:6995  
 TI Oil-based ink for electrostatic ink jet printer  
 IN Kato, Eiichi  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 42 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D011-00  
 ICS B41J002-01; B41M005-00; C08F002-08; C08F214-18; B41C001-10  
 CC 42-12 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 35, 38  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001139862	A2	20010522	JP 2000-261798	20000830
PRAI	JP 1999-243345	A	19990830		

AB The ink, showing stable extrusion from an outlet of an electrostatic ink-jet printer, contains charged resin particles dispersed in a nonaq. liquid medium with elec. resistivity  $\geq 10^9 \Omega\text{-cm}$  and dielec. coefficient  $\leq 3.5$ . The particles are those prepared by polymerization granulation of  $\geq 1$  nonaq. medium-soluble monofunctional monomers giving nonaq. medium-insol. polymers and  $\geq 1$  monomers substituted with F- and/or Si-containing groups, which are polymerizable with the above monomers, in the presence of a nonaq. medium-soluble polymer as dispersion stabilizer. The polymers of the particles, whose backbones are partially crosslinked, involve  $[\text{CHb1C}(\text{V0L})\text{b2}]$  [ $\text{V0} = \text{CO}_2, \text{OCO}, (\text{CH}_2)\text{rCO}_2, (\text{CH}_2)\text{rOCO}, \text{O}, \text{C}_6\text{H}_4\text{X}$ ;  $\text{X} =$  direct bond,  $\text{O}, \text{OCO}, \text{CO}_2$ ;  $\text{r} = 1\text{-}12$ ;  $\text{L} = \text{C}_8\text{-}32$  alkyl,  $\text{C}_8\text{-}32$  alkenyl;  $\text{b1}, \text{b2} = \text{H}, \text{halogen}, \text{cyano}, \text{C1-}7$  hydrocarbyl,  $\text{CO}_2\text{D1}$  (associated with hydrocarbylene);  $\text{D1} = \text{H}, \text{C1-}22$  hydrocarbyl]. Thus, 98 g vinyl acetate and 2 g  $\text{CH}_2\text{:CMeCO}_2\text{CH}_2\text{C}_6\text{F}_{13}$  were polymerized in the presence of 100:1 octadecyl methacrylate-divinylbenzene copolymer as a dispersion stabilizer in Isopar H using 2,2'-azobis(isovaleronitrile) and AIBN at 80-100° for 6 h in vacuo to give polymer particles, 50 g of which were dispersed in a blue paraffin oil (Isopar G)-based medium to give the jet-printing ink.

ST electrostatic jet printing ink charged particle; dispersion nonaq liq medium printing ink; polymn granulation dispersion stabilizer polymer; vinyl acetate fluorohexyl acrylate copolymer particle; stable dispersion electrostatic jet printing ink; octadecyl methacrylate divinylbenzene copolymer dispersion stabilizer; partially crosslinked charged particle printing ink

IT Inks  
 (jet-printing; oil-based electrostatic ink-jet printing ink containing partially crosslinked polymer charged particles)

IT Crosslinking  
 (oil-based electrostatic ink-jet printing ink containing partially crosslinked polymer charged particles)

IT Inks

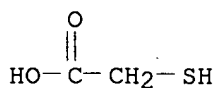
(oil-based; oil-based electrostatic ink-jet printing ink containing partially crosslinked polymer charged particles)

- IT Disperse systems  
(stabilizers; oil-based electrostatic ink-jet printing ink containing partially crosslinked polymer charged particles in presence of)
- IT 920-46-7DP, Methacryloyl chloride, esters with (meth)acrylate polymers 61255-17-2P, Divinylbenzene-dodecyl methacrylate copolymer 122324-74-7P, Divinylbenzene-octadecyl methacrylate copolymer 130805-21-9P, Divinylbenzene-tridecyl methacrylate copolymer 130805-26-4DP, Divinylbenzene-hexadecyl methacrylate copolymer, polar group-modified 134240-04-3DP, Ethylene glycol diacrylate-octadecyl methacrylate copolymer, hydroxy-terminated, esters with methacryloyl chloride 139703-31-4P, Divinylbenzene-octadecyl methacrylate-thioglycolic acid telomer 139703-33-6P, Divinylbenzene-thioglycolic acid-tridecyl methacrylate telomer 139720-57-3P 139720-59-5P 139720-60-8P 139720-61-9P 139720-62-0P 139720-63-1P 141181-86-4P, Divinylbenzene-dodecyl methacrylate-thioglycolic acid telomer 148532-67-6P, Dodecyl methacrylate-octyl methacrylate-trivinylbenzene copolymer 148532-68-7P, Butyl methacrylate-ethylene glycol dimethacrylate-octadecyl methacrylate copolymer 148532-76-7P, Butyl methacrylate-ethylene glycol dimethacrylate-octadecyl methacrylate-thioglycolic acid telomer **148532-82-5P**, Divinyl adipate-hexadecyl methacrylate-thioglycolic acid telomer 148640-01-1P 159291-22-2P, Dodecyl methacrylate-octyl methacrylate-thioglycolic acid-trivinylbenzene telomer 159291-24-4P 159446-39-6P 159446-41-0P 159446-42-1P 159446-44-3P 159446-45-4P 159446-48-7P 214772-24-4P 214772-26-6P 214772-29-9P 215672-71-2P 218459-53-1P 218459-59-7P 218459-61-1P **218459-65-5P** 218459-67-7P 218459-70-2P 218459-72-4P 218459-73-5P 218459-74-6P 218459-75-7P 218459-76-8P 308283-76-3DP, Docosyl methacrylate-polyethylene glycol diacrylate copolymer, polar group-modified 324529-94-4P, Ethylene glycol diacrylate-hexadecyl methacrylate copolymer 324574-60-9P 324574-61-0P  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
(dispersion stabilizer; oil-based electrostatic ink-jet printing ink containing partially crosslinked polymer charged particles prepared in presence of)
- IT 188601-24-3P 308278-63-9P 308278-71-9P 308278-72-0P 308278-73-1P 308278-75-3P 308278-78-6P 308278-80-0P 308278-81-1P 308278-84-4P 308278-85-5P 308278-87-7P 340177-76-6P 340177-77-7P 340177-79-9P 340177-80-2P 340177-81-3P 340177-82-4P 340177-83-5P 340177-84-6P 340773-92-4P 340773-93-5P 340773-94-6P 340773-95-7P 340773-96-8P 340773-97-9P 340773-98-0P 340773-99-1P 340774-00-7P 340774-01-8P 340774-02-9P 340774-03-0P 340774-04-1P 340774-05-2P 340774-06-3P 340774-07-4P 340774-08-5P 340774-09-6P 340774-10-9P 340774-11-0P **340774-12-1P** 340774-13-2P 340774-14-3P 340774-15-4P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(oil-based electrostatic ink-jet printing ink containing partially crosslinked polymer charged particles)
- IT **148532-82-5P**, Divinyl adipate-hexadecyl methacrylate-thioglycolic acid telomer **218459-65-5P**  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
(dispersion stabilizer; oil-based electrostatic ink-jet printing ink containing partially crosslinked polymer charged particles prepared in presence of)
- RN 148532-82-5 HCAPLUS

CN Hexanedioic acid, diethenyl ester, telomer with hexadecyl  
2-methyl-2-propenoate and mercaptoacetic acid (9CI) (CA INDEX NAME)

CM 1

CRN 68-11-1  
CMF C2 H4 O2 S

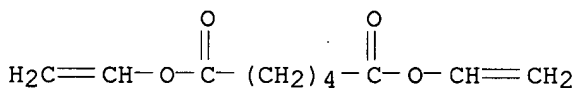


CM 2

CRN 148532-81-4  
CMF (C20 H38 O2 . C10 H14 O4)x  
CCI PMS

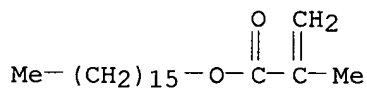
CM 3

CRN 4074-90-2  
CMF C10 H14 O4



CM 4

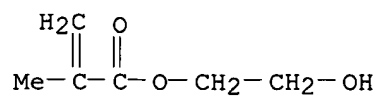
CRN 2495-27-4  
CMF C20 H38 O2



RN 218459-65-5 HCAPLUS  
CN Hexanedioic acid, diethenyl ester, telomer with butyl 2-methyl-2-  
propenoate, dodecyl 2-methyl-2-propenoate and mercaptoacetic acid,  
2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9  
CMF C6 H10 O3



CM 2

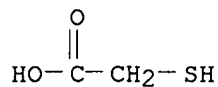
CRN 218459-64-4

CMF (C16 H30 O2 . C10 H14 O4 . C8 H14 O2)x . C2 H4 O2 S

CM 3

CRN 68-11-1

CMF C2 H4 O2 S



CM 4

CRN 218459-63-3

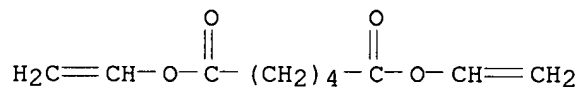
CMF (C16 H30 O2 . C10 H14 O4 . C8 H14 O2)x

CCI PMS

CM 5

CRN 4074-90-2

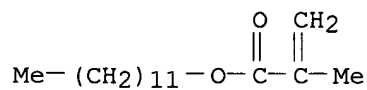
CMF C10 H14 O4



CM 6

CRN 142-90-5

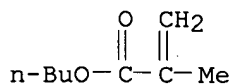
CMF C16 H30 O2



CM 7

CRN 97-88-1

CMF C8 H14 O2



IT **340774-12-1P**

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(oil-based electrostatic **ink-jet** printing ink  
containing partially crosslinked polymer charged particles)

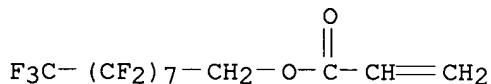
RN 340774-12-1 HCAPLUS

CN Hexanedioic acid, diethenyl ester, telomer with butyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate and mercaptoacetic acid, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptafluorononyl 2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 307-87-9

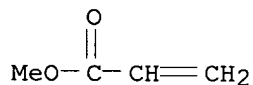
CMF C12 H5 F17 O2



CM 2

CRN 96-33-3

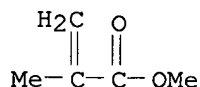
CMF C4 H6 O2



CM 3

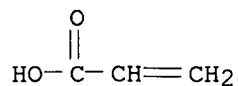
CRN 80-62-6

CMF C5 H8 O2



CM 4

CRN 79-10-7  
CMF C3 H4 O2

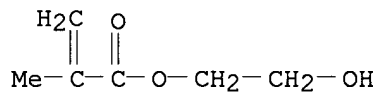


CM 5

CRN 218459-65-5  
CMF (C16 H30 O2 . C10 H14 O4 . C8 H14 O2)x . x C6 H10 O3 . C2 H4 O2 S

CM 6

CRN 868-77-9  
CMF C6 H10 O3

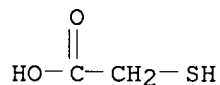


CM 7

CRN 218459-64-4  
CMF (C16 H30 O2 . C10 H14 O4 . C8 H14 O2)x . C2 H4 O2 S

CM 8

CRN 68-11-1  
CMF C2 H4 O2 S

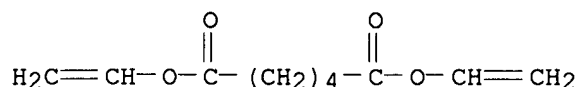


CM 9

CRN 218459-63-3  
CMF (C16 H30 O2 . C10 H14 O4 . C8 H14 O2)x  
CCI PMS

CM 10

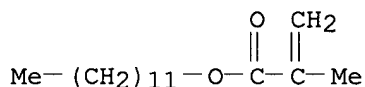
CRN 4074-90-2  
CMF C10 H14 O4



CM 11

CRN 142-90-5

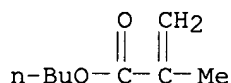
CMF C16 H30 O2



CM 12

CRN 97-88-1

CMF C8 H14 O2



L8 ANSWER 14 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:347156 HCAPLUS

DN 134:368377

TI Oil-based ink for electrostatic ink-jet printing

IN Kato, Eiichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 47 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D011-00

ICS B41J002-01; B41M005-00

CC 42-12 (Coatings, Inks, and Related Products)

Section cross-reference(s): 74

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001131455	A2	20010515	JP 2000-255846	20000825
PRAI	JP 1999-238824	A	19990825		

AB Title ink-jet ink, with good discharging stability as well as image brightness and strength for multiple printing, is prepared by dispersing in a nonaq. solution having elec. resistivity of  $\geq 109 \Omega \cdot \text{cm}$  and permittivity of  $\leq 3.5$ , with particles prepared from a solution containing (A) monofunctional monomers, which are soluble in a nonaq. solvent but the resulted copolymer of which not, (B) amino-containing monofunctional monomers (copolymerizable with A), (C) SO<sub>3</sub> and/or SO<sub>2</sub>H-containing monofunctional monomers (copolymerizable with A), (D) monofunctional macromonomers having

main chains composed of specific repeat units with a terminal polymerizable double-bond group at one end, and (E) a star-type copolymer.

ST oil based electrostatic ink jet printing

IT Isoalkanes  
RL: NUU (Other use, unclassified); USES (Uses)  
(C7-10, Isopar E; preparation of oil-based ink for electrostatic ink-jet printing)

IT Isoalkanes  
RL: NUU (Other use, unclassified); USES (Uses)  
(C9-12, Isopar G; preparation of oil-based ink for electrostatic ink-jet printing)

IT Carbon black, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(Microlith Black CT; preparation of oil-based ink for electrostatic ink-jet printing)

IT Paraffin oils  
RL: NUU (Other use, unclassified); USES (Uses)  
(Shellsol 71; preparation of oil-based ink for electrostatic ink-jet printing)

IT Naphthenic acids, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(cobalt salts; preparation of oil-based ink for electrostatic ink-jet printing)

IT Printing (nonimpact)  
(electrostatic; preparation of oil-based ink for electrostatic ink-jet printing)

IT Inks  
(jet-printing; preparation of oil-based ink for electrostatic ink-jet printing)

IT Inks  
(oil-based; preparation of oil-based ink for electrostatic ink-jet printing)

IT Dispersing agents  
(preparation of oil-based ink for electrostatic ink-jet printing)

IT Polymers, uses  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(star-branched; preparation of oil-based ink for electrostatic ink-jet printing)

IT 150551-83-0 150551-89-6 150551-92-1 150551-93-2 150551-97-6  
154340-06-4 155293-25-7 159967-38-1 159967-39-2 159967-40-5  
159967-41-6 159967-42-7 159967-43-8 159967-44-9  
RL: CAT (Catalyst use); USES (Uses)  
(initiator; preparation of oil-based ink for electrostatic ink-jet printing)

IT 138005-15-9DP, 4,4'-azobis[4-cyanovaleric acid]-initiated,  
2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester 139104-87-3P  
139104-90-8P 139105-03-6P 139105-08-1P 139105-12-7P 141414-99-5P  
141415-72-7P 214835-07-1P 215877-54-6P 215877-61-5P 217076-83-0P  
333362-05-3P 339334-13-3P 339334-16-6P 339334-20-2P  
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(macromer; preparation of oil-based ink for electrostatic ink-jet printing)

IT 339275-35-3P, 2-(N,N-Diethylamino)ethyl crotonate-octadecyl methacrylate-4-sulfobutyl crotonate-vinyl acetate graft copolymer  
339275-36-4P, Dodecyl methacrylate-methyl acrylate-2-(N,N-dimethylamino)ethyl methacrylate-methyl methacrylate-3-sulfopropyl methacrylate graft copolymer 339275-37-5P, Methyl acrylate-2-(N,N-dimethylamino)ethyl methacrylate-methyl methacrylate-3-sulfopropyl

methacrylate-tridecyl methacrylate graft copolymer 339275-38-6P,  
Hexadecyl methacrylate-methyl acrylate-2-(N,N-dimethylamino)ethyl  
methacrylate-methyl methacrylate-3-sulfopropyl methacrylate graft  
copolymer 339275-39-7P, Methyl acrylate-2-(N,N-dimethylamino)ethyl  
methacrylate-methyl methacrylate-octadecyl acrylate-3-sulfopropyl  
methacrylate graft copolymer 339275-40-0P 339275-41-1P 339275-43-3P  
339275-44-4P 339275-46-6P 339275-47-7P 339275-48-8P 339275-49-9P  
339275-50-2P 339275-51-3P 339275-52-4P 339275-53-5P 339275-55-7P  
339275-57-9P 339275-59-1P 339275-61-5P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP  
(Properties); TEM (Technical or engineered material use); PREP  
(Preparation); USES (Uses)

(preparation of oil-based ink for electrostatic ink-jet printing)

IT 2373-23-1 7440-67-7D, Zirconium, dioctylsulfosuccinic acid complex, uses  
25719-52-2, Polydodecylmethacrylate

RL: MOA (Modifier or additive use); USES (Uses)

(preparation of oil-based ink for electrostatic ink-jet printing)

IT 107-46-0, Hexamethyldisiloxane

RL: NUU (Other use, unclassified); USES (Uses)

(preparation of oil-based ink for electrostatic ink-jet printing)

IT 2580-56-5, Victoria Blue B 68993-80-6, Alkali Blue

RL: TEM (Technical or engineered material use); USES (Uses)

(preparation of oil-based ink for electrostatic ink-jet printing)

IT 150469-59-3P 159967-35-8P, Dodecyl methacrylate-ethyl acrylate-methyl  
methacrylate block copolymer 159967-36-9P, Methyl acrylate-methyl  
methacrylate-stearyl methacrylate block copolymer **159967-46-1P**,  
Hexadecyl methacrylate-vinyl acetate-vinyl propionate block copolymer  
159967-47-2P 159967-48-3P 159967-49-4P 159967-50-7P 159967-51-8P  
**159967-52-9P** 159967-53-0P 159967-54-1P 159967-55-2P

216988-37-3P, Dodecyl acrylate-4-methylstyrene-octadecenyl  
methacrylate-styrene block copolymer 339569-47-0P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP  
(Properties); TEM (Technical or engineered material use); PREP  
(Preparation); USES (Uses)

(star; preparation of oil-based ink for electrostatic ink-  
jet printing)

IT **159967-46-1P**, Hexadecyl methacrylate-vinyl acetate-vinyl  
propionate block copolymer **159967-52-9P**

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP  
(Properties); TEM (Technical or engineered material use); PREP  
(Preparation); USES (Uses)

(star; preparation of oil-based ink for electrostatic ink-  
jet printing)

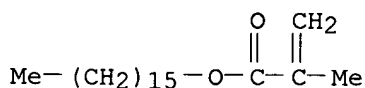
RN 159967-46-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, hexadecyl ester, polymer with ethenyl acetate  
and ethenyl propanoate, block (9CI) (CA INDEX NAME)

CM 1

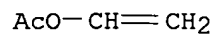
CRN 2495-27-4

CMF C20 H38 O2



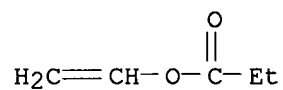
CM 2

CRN 108-05-4  
CMF C4 H6 O2



CM 3

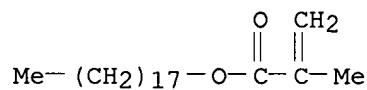
CRN 105-38-4  
CMF C5 H8 O2



RN 159967-52-9 HCAPLUS  
CN Dodecanoic acid, ethenyl ester, polymer with ethenyl acetate,  
methoxyethene and octadecyl 2-methyl-2-propenoate, block (9CI) (CA INDEX  
NAME)

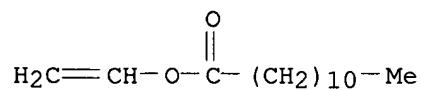
CM 1

CRN 32360-05-7  
CMF C22 H42 O2



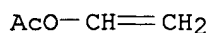
CM 2

CRN 2146-71-6  
CMF C14 H26 O2



CM 3

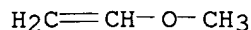
CRN 108-05-4  
CMF C4 H6 O2



CM 4

CRN 107-25-5

CMF C3 H6 O



L8 ANSWER 15 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:194881 HCAPLUS

DN 134:239021

TI Oily inks for electrostatic ink jet

IN Kato, Eiichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 48 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D011-00

ICS B41J002-01; B41M005-00

CC 42-12 (Coatings, Inks, and Related Products)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001072908	A2	20010321	JP 2000-203859	20000705
PRAI	JP 1999-190784	A	19990705		

AB Star blocked vinyl polymers are prepared and used as dispersion stabilizers. Thus, Me acrylate-Me methacrylate-stearyl methacrylate block copolymer initiated with 1,3,5-benzenetriyltris(methylene) dimethylcarbamodithioate was prepared and used as a dispersion stabilizer in manufacture of 5:95 2-(N,N-diethylamino)ethyl crotonate-vinyl acetate copolymer (I). An ink contained I 50, an alkali blue dispersion 18, and Co naphthenate 0.15 g in 1 L Isopar E.

ST dispersion stabilizer star block vinyl polymer; electrostatic jet printing ink

IT Polymerization

(block; oily inks containing resin granules for electrostatic ink jet)

IT Chemical chains

(branching; oily inks containing resin granules for electrostatic ink jet)

IT Inks

(jet-printing; oily inks containing resin granules for electrostatic ink jet)

IT Disperse systems

Stabilizing agents

(oily inks containing resin granules for electrostatic ink jet)

IT Vinyl compounds, uses

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polymers; oily inks containing resin granules for electrostatic ink jet)

IT 150469-59-3P 159967-35-8P, Ethyl acrylate-lauryl methacrylate-methyl methacrylate block copolymer 159967-36-9P, Methyl acrylate-methyl

methacrylate-stearyl methacrylate block copolymer 159967-45-0P

**159967-46-1P** 159967-47-2P 159967-48-3P 159967-49-4P

159967-50-7P 159967-51-8P **159967-52-9P** 159967-53-0P

159967-54-1P 159967-55-2P 159967-56-3P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(dispersion stabilizers; oily inks containing resin granules for electrostatic **ink jet**)

IT 113718-78-8P 308283-80-9P 308283-81-0P 308283-82-1P 308283-83-2P

**308283-84-3P** 308283-85-4P 308283-88-7P 308283-89-8P

308283-93-4P 308284-08-4P 308284-10-8P 308284-11-9P 308284-12-0P

308367-83-1P 329910-75-0P 329910-76-1P 329910-77-2P 329910-78-3P

329910-80-7P 329910-81-8P 329910-82-9P 329910-83-0P 329910-84-1P

329910-85-2P 329910-87-4P 329910-88-5P 329910-89-6P 329910-90-9P

329910-91-0P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(oily inks containing resin granules for electrostatic **ink jet**)

IT 150551-83-0 150551-89-6 150551-92-1 150551-93-2 150551-97-6

154340-06-4 155293-25-7 159967-38-1 159967-39-2 159967-40-5

159967-41-6 159967-42-7 159967-43-8 159967-44-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(oily inks containing resin granules for electrostatic ink jet)

IT 25719-52-2, Poly(dodecyl methacrylate)

RL: TEM (Technical or engineered material use); USES (Uses)

(oily inks containing resin granules for electrostatic ink jet)

IT **159967-46-1P 159967-52-9P**

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(dispersion stabilizers; oily inks containing resin granules for electrostatic **ink jet**)

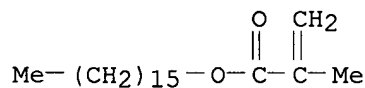
RN 159967-46-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, hexadecyl ester, polymer with ethenyl acetate and ethenyl propanoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 2495-27-4

CMF C20 H38 O2



CM 2

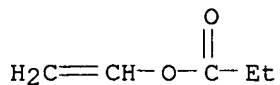
CRN 108-05-4

CMF C4 H6 O2



CM 3

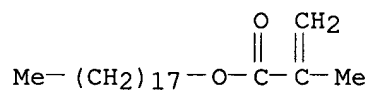
CRN 105-38-4  
CMF C5 H8 O2



RN 159967-52-9 HCAPLUS  
CN Dodecanoic acid, ethenyl ester, polymer with ethenyl acetate, methoxyethene and octadecyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

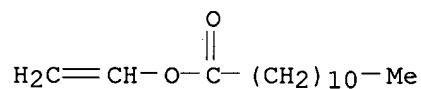
CM 1

CRN 32360-05-7  
CMF C22 H42 O2



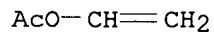
CM 2

CRN 2146-71-6  
CMF C14 H26 O2



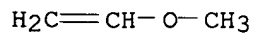
CM 3

CRN 108-05-4  
CMF C4 H6 O2



CM 4

CRN 107-25-5  
CMF C3 H6 O



IT 308283-84-3P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(oily inks containing resin granules for electrostatic ink jet)

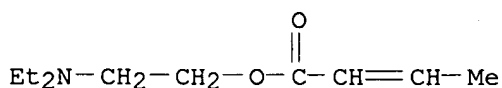
RN 308283-84-3 HCAPLUS

CN Dodecanoic acid, ethenyl ester, polymer with 2-(diethylamino)ethyl 2-butenate and ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 10369-84-3

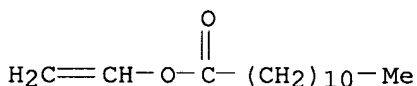
CMF C10 H19 N O2



CM 2

CRN 2146-71-6

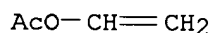
CMF C14 H26 O2



CM 3

CRN 108-05-4

CMF C4 H6 O2



L8 ANSWER 16 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:194880 HCAPLUS

DN 134:239020

TI Oily inks for electrostatic ink jet

IN Kato, Eiichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 57 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D011-00

ICS B41J002-01; B41M005-00

CC 42-12 (Coatings, Inks, and Related Products)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001072907	A2	20010321	JP 2000-203848	20000705
PRAI	JP 1999-190783	A	19990705		
AB	Star blocked vinyl polymers are prepared and used as dispersion stabilizers to prepare resins containing macromonomer units. Thus, Me acrylate-Me methacrylate-stearyl methacrylate block copolymer initiated with 1,3,5-benzenetriyltris(methylene) dimethylcarbamodithioate was prepared and used as a dispersion stabilizer to prepare a resin (I) from 2-(N,N-diethylamino)ethyl crotonate 5, vinyl acetate 91, and octadecyl methacrylate-3-mercaptopropionic acid-glycidyl methacrylate macromonomer 4 g. An ink contained I 50, an alkali blue dispersion 18, and Co naphthenate 0.15 g in 1 L Isopar E.				
ST	dispersion stabilizer star block vinyl polymer; electrostatic jet printing ink; macromonomer vinyl polymer jet printing ink				
IT	Polymerization (block; oily inks containing resin granules for electrostatic ink jet)				
IT	Chemical chains (branching; oily inks containing resin granules for electrostatic ink jet)				
IT	Inks (jet-printing; oily inks containing resin granules for electrostatic ink jet)				
IT	Disperse systems Stabilizing agents Telomerization (oily inks containing resin granules for electrostatic ink jet)				
IT	Macromonomers RL: RCT (Reactant); RACT (Reactant or reagent) (oily inks containing resin granules for electrostatic ink jet)				
IT	Vinyl compounds, uses RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses) (polymers; oily inks containing resin granules for electrostatic ink jet)				
IT	150469-59-3P 159967-35-8P, Ethyl acrylate-lauryl methacrylate-methyl methacrylate block copolymer 159967-36-9P, Methyl acrylate-methyl methacrylate-stearyl methacrylate block copolymer 159967-45-0P <b>159967-46-1P</b> 159967-47-2P 159967-48-3P 159967-49-4P 159967-50-7P 159967-51-8P <b>159967-52-9P</b> 159967-53-0P 159967-54-1P 159967-55-2P 159967-56-3P RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses) (dispersion stabilizers; oily inks containing resin granules for electrostatic ink jet)				
IT	<b>213547-33-2P 213547-35-4P 213547-37-6P</b> <b>213547-38-7P 213547-40-1P</b> 213547-63-8P 213547-67-2P 213547-70-7P 213547-74-1P <b>329914-67-2P 329914-68-3P</b> <b>329914-71-8P 329914-72-9P 329914-74-1P</b> <b>329914-77-4P</b> RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (oily inks containing resin granules for electrostatic ink jet)				
IT	324529-97-7P 324529-98-8P 324529-99-9P 324530-00-9P 324530-01-0P 329914-50-3P 329914-51-4P 329914-52-5P 329914-54-7P 329914-55-8P 329914-56-9P 329914-57-0P 329914-58-1P 329914-59-2P 329914-60-5P 329914-61-6P 329914-62-7P 329914-63-8P 329914-64-9P 329914-65-0P 329914-66-1P 329914-79-6P 329965-97-1P RL: IMF (Industrial manufacture); TEM (Technical or engineered material)				

use); PREP (Preparation); USES (Uses)

(oily inks containing resin granules for electrostatic ink jet)

IT 150551-83-0 150551-89-6 150551-92-1 150551-93-2 150551-97-6  
154340-06-4 155293-25-7 159967-38-1 159967-39-2 159967-40-5  
159967-41-6 159967-42-7 159967-43-8 159967-44-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(oily inks containing resin granules for electrostatic ink jet)

IT 25719-52-2, Poly(dodecyl methacrylate)

RL: TEM (Technical or engineered material use); USES (Uses)

(oily inks containing resin granules for electrostatic ink jet)

IT **159967-46-1P 159967-52-9P**

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(dispersion stabilizers; oily inks containing resin granules for electrostatic ink jet)

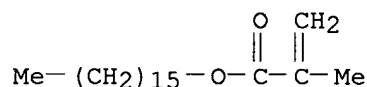
RN 159967-46-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, hexadecyl ester, polymer with ethenyl acetate and ethenyl propanoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 2495-27-4

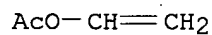
CMF C20 H38 O2



CM 2

CRN 108-05-4

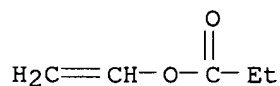
CMF C4 H6 O2



CM 3

CRN 105-38-4

CMF C5 H8 O2

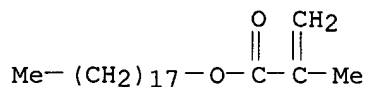


RN 159967-52-9 HCAPLUS

CN Dodecanoic acid, ethenyl ester, polymer with ethenyl acetate, methoxyethene and octadecyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

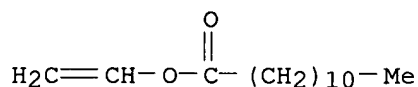
CM 1

CRN 32360-05-7  
CMF C22 H42 O2



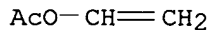
CM 2

CRN 2146-71-6  
CMF C14 H26 O2



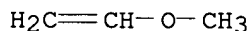
CM 3

CRN 108-05-4  
CMF C4 H6 O2



CM 4

CRN 107-25-5  
CMF C3 H6 O



IT 213547-33-2P 213547-35-4P 213547-37-6P  
213547-38-7P 213547-40-1P 329914-67-2P  
329914-68-3P 329914-71-8P 329914-72-9P  
329914-74-1P 329914-77-4P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT  
(Reactant or reagent)

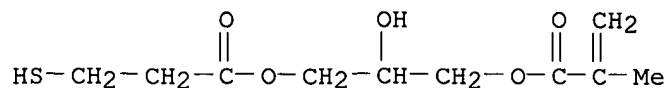
(oily inks containing resin granules for electrostatic **ink**  
**jet**)

RN 213547-33-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl  
ester, telomer with octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0  
CMF C10 H16 O5 S



CM 2

CRN 25639-21-8

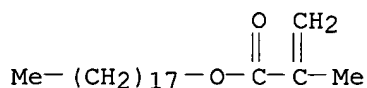
CMF (C22 H42 O2) x

CCI PMS

CM 3

CRN 32360-05-7

CMF C22 H42 O2



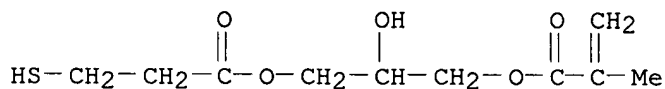
RN 213547-35-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, telomer with  
2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate (9CI)  
(CA INDEX NAME)

CM 1

CRN 125571-36-0

CMF C10 H16 O5 S



CM 2

CRN 25719-52-2

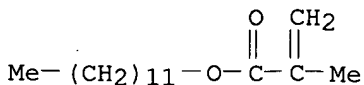
CMF (C16 H30 O2) x

CCI PMS

CM 3

CRN 142-90-5

CMF C16 H30 O2



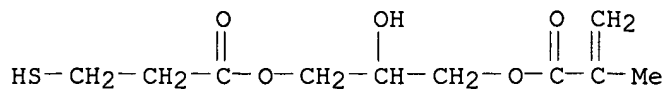
RN 213547-37-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl ester, telomer with tridecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0

CMF C10 H16 O5 S



CM 2

CRN 41630-11-9

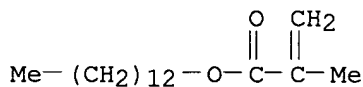
CMF (C17 H32 O2) x

CCI PMS

CM 3

CRN 2495-25-2

CMF C17 H32 O2



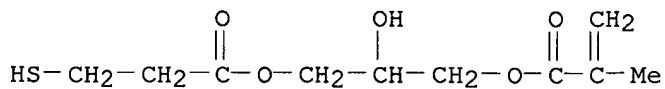
RN 213547-38-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, hexadecyl ester, telomer with 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0

CMF C10 H16 O5 S



CM 2

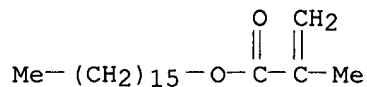
CRN 25986-80-5

CMF (C20 H38 O2) x

CCI PMS

CM 3

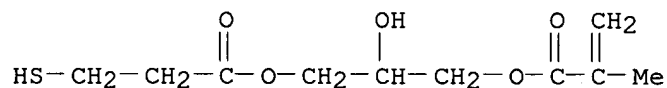
CRN 2495-27-4  
CMF C20 H38 O2



RN 213547-40-1 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl ester, telomer with octadecyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0  
CMF C10 H16 O5 S

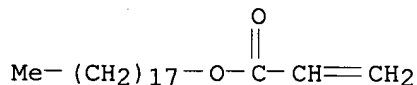


CM 2

CRN 25986-77-0  
CMF (C21 H40 O2)x  
CCI PMS

CM 3

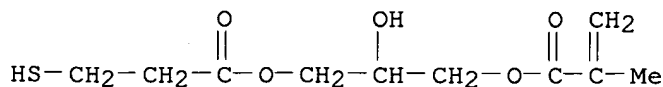
CRN 4813-57-4  
CMF C21 H40 O2



RN 329914-67-2 HCAPLUS  
CN Pentanedioic acid, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl octyl ester, telomer with 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0  
CMF C10 H16 O5 S

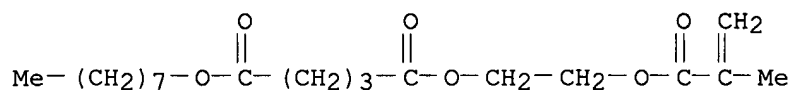


CM 2

CRN 320784-81-4  
CMF (C19 H32 O6)x  
CCI PMS

CM 3

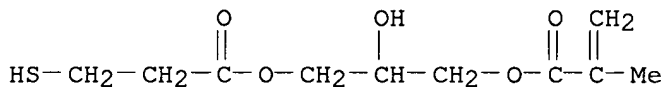
CRN 320784-80-3  
CMF C19 H32 O6



RN 329914-68-3 HCAPLUS  
CN Butanedioic acid, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl nonyl ester,  
telomer with 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl  
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0  
CMF C10 H16 O5 S

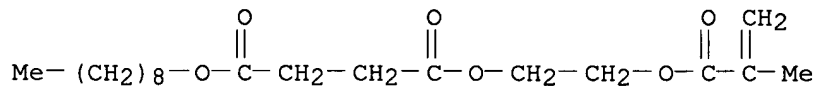


CM 2

CRN 217076-81-8  
CMF (C19 H32 O6)x  
CCI PMS

CM 3

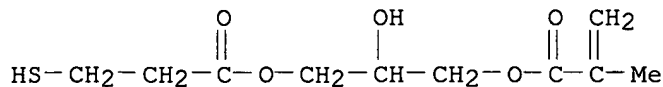
CRN 215672-75-6  
CMF C19 H32 O6



RN 329914-71-8 HCAPLUS  
CN 2-Butenedioic acid, hexyl 2-[(1-oxo-2-propenyl)oxy]ethyl ester, telomer  
with 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate  
(9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0  
CMF C10 H16 O5 S

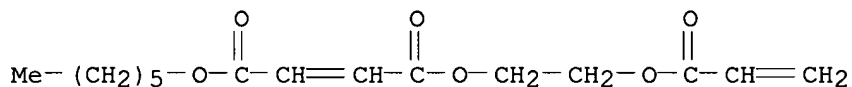


CM 2

CRN 329914-70-7  
CMF (C15 H22 O6) x  
CCI PMS

CM 3

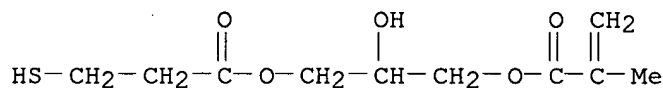
CRN 329914-69-4  
CMF C15 H22 O6



RN 329914-72-9 HCAPLUS  
CN Heptanoic acid, 1-[[[(1-oxo-2-propenyl)oxy]methyl]-1,2-ethanediyl ester, telomer with 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0  
CMF C10 H16 O5 S

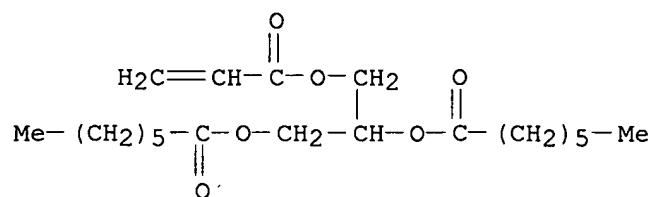


CM 2

CRN 165892-36-4  
CMF (C20 H34 O6) x  
CCI PMS

CM 3

CRN 141657-06-9  
CMF C20 H34 O6



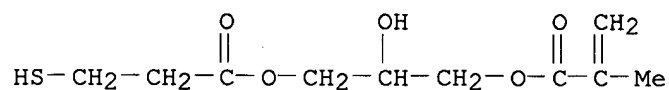
RN 329914-74-1 HCAPLUS

CN Nonanoic acid, 1-[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-2-[(1-oxohexyl)oxy]ethyl ester, telomer with 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0

CMF C10 H16 O5 S



CM 2

CRN 329914-73-0

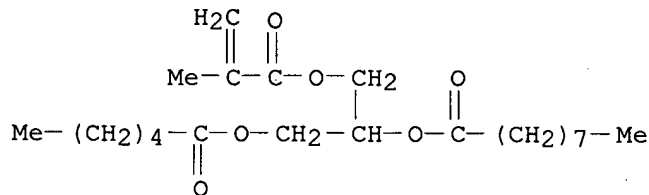
CMF (C22 H38 O6) x

CCI PMS

CM 3

CRN 329914-49-0

CMF C22 H38 O6



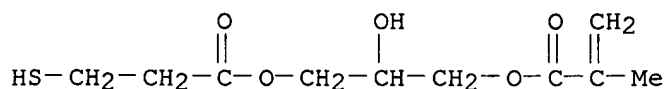
RN 329914-77-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl ester, telomer with 2-[3-(dodecylsulfonyl)-1-oxopropoxy]ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0

CMF C10 H16 O5 S

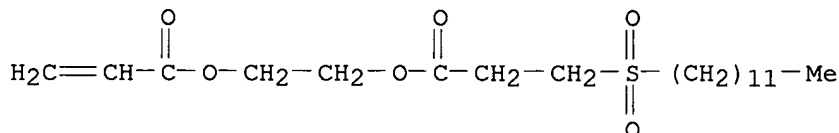


CM 2

CRN 329914-76-3  
 CMF (C20 H36 O6 S)x  
 CCI PMS

CM 3

CRN 329914-75-2  
 CMF C20 H36 O6 S



L8 ANSWER 17 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 2001:107943 HCAPLUS  
 DN 134:164633  
 TI Oil-based inks for electrostatic ink jet printing  
 IN Kato, Eiichi  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 47 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D011-00  
 ICS B41J002-01; B41M005-00  
 CC 42-12 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 74  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001040257	A2	20010213	JP 2000-154625	20000525
PRAI	JP 1999-145225	A	19990525		

AB Title inks are obtained by dispersing charge-bearing resin particles in a nonaq. liquid medium having elec. resistance of  $\geq 10^9 \Omega \cdot \text{cm}$  and permittivity of  $\leq 3.5$ , where the particles are prepared by the polymerization of (A) monofunctional monomers which are soluble in nonaq. solvents and become insol. in the solvents by polymerization and (B) amino group-containing monomers and monofunctional macromonomers with  $M_w \leq 2 + 104$  in the presence of polymeric dispersion stabilizers soluble in the nonaq. solvents. Thus, octadecyl methacrylate-divinylbenzene copolymer dispersion stabilizer 15, vinyl acetate '93, 2-(N,N-diethylamino)ethyl crotonate 5, and macromonomer  $\text{CH}_2:\text{CMeCOOCH}_2\text{CH}(\text{OH})\text{CH}_2\text{OCOCH}_2\text{CH}_2\text{S}[\text{CH}_2\text{CMe}(\text{COOC18H37})]_n\text{H}$  4, and Isopar H 285

g were heated to give a resin particle with average diameter 0.38  $\mu\text{m}$  and Mw 1 + 105, which gave an oil-based ink having good discharge stability and clear image.

- ST oil based ink charge resin particle prepn; electrostatic ink jet printing ink
- IT Printing (nonimpact)  
(electrostatic; preparation of resin particles for electrostatic ink jet printing oil-based inks)
- IT Inks  
(jet-printing; preparation of resin particles for electrostatic ink jet printing oil-based inks)
- IT Dispersing agents  
(polymeric; preparation of resin particles for electrostatic ink jet printing oil-based inks)
- IT Lithographic plates  
(preparation of resin particles for electrostatic ink jet printing oil-based inks)
- IT Macromonomers  
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of resin particles for electrostatic ink jet printing oil-based inks)
- IT 2638-94-ODP, 4,4'-Azobis(4-cyanovaleric acid), reaction products with methacrylate polymers and optionally glycidyl methacrylate  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(dispersion stabilizer or macromonomer; preparation of resin particles for electrostatic ink jet printing oil-based inks)
- IT 61255-17-2P, Divinylbenzene-dodecyl methacrylate copolymer 122324-74-7P, Divinylbenzene-octadecyl methacrylate copolymer 130805-21-9P, Divinylbenzene-tridecyl methacrylate copolymer 130805-26-4DP, Divinylbenzene-hexadecyl methacrylate copolymer, carboxy-terminated 139703-31-4P, Divinylbenzene-octadecyl methacrylate-thioglycolic acid telomer 139703-33-6P, Divinylbenzene-thioglycolic acid-tridecyl methacrylate telomer 139703-38-1P 139720-57-3P 139720-59-5P 139720-60-8P 139720-61-9P 139720-62-0P 139720-63-1P 141181-86-4P, Divinylbenzene-dodecyl methacrylate-thioglycolic acid telomer 148532-67-6P, Dodecyl methacrylate-octyl methacrylate-trivinylbenzene copolymer 148532-68-7P, Butyl methacrylate-ethylene glycol dimethacrylate-octadecyl methacrylate copolymer 148532-76-7P 159291-22-2P 159291-24-4P 215672-71-2P 308283-76-3DP, Docosyl methacrylate-polyethylene glycol diacrylate copolymer, hydroxy-terminated 324529-94-4P  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
(dispersion stabilizer; preparation of resin particles for electrostatic ink jet printing oil-based inks)
- IT 4693-47-4DP, 4,4'-Azobis(4-cyanopentanol), reaction products with (meth)acrylate polymers and optionally methacryloyl chloride  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(dispersion stabilizer; preparation of resin particles for electrostatic ink jet printing oil-based inks)
- IT 108-05-4DP, Vinyl acetate, reaction products with methacrylate telomers 920-46-7DP, Methacryloyl chloride, reaction products with hydroxy-terminated acrylate polymers 148640-01-1P, Divinylbenzene-octadecyl methacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl methacrylate 159446-39-6P 159446-41-0P 159446-42-1P

159446-45-4P, Divinylbenzene-2-mercaptoethanol-octadecyl methacrylate telomer, ester with methacrylic acid 159446-48-7P, Divinylbenzene-2-mercaptoethanol-octadecyl methacrylate telomer, ester with acrylic acid 166242-47-3DP, reaction products with vinyl acetate 214772-24-4P, Divinylbenzene-2-mercaptoethanol-octadecyl methacrylate telomer, ester with 2-carboxyethyl acrylate 214772-26-6P, Divinylbenzene-2-mercaptoethanol-octadecyl methacrylate telomer, ester with  $\alpha$ -chloroacrylic acid 214772-29-9P 218459-53-1P, Allyl methacrylate-dodecyl methacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl methacrylate 218459-59-7P, Ethylene glycol dimethacrylate-octadecyl methacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl methacrylate 218459-61-1P, Hexadecyl methacrylate-propylene glycol dimethacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl methacrylate **218459-65-5P**, Butyl methacrylate-divinyl adipate-dodecyl methacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl methacrylate 218459-67-7P 218459-70-2P, 2-Chloroethyl methacrylate-tridecyl methacrylate-trimethylolpropane trimethacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl methacrylate 218459-72-4P, Divinylbenzene-styrene-tetradecyl methacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl methacrylate 218459-73-5P 218459-74-6P 218459-75-7P 218459-76-8P 218459-77-9DP, Ethylene glycol diacrylate-octadecyl acrylate copolymer, hydroxy-terminated, esters with methacryloyl chloride 324529-96-6P 324574-60-9P 324574-61-0P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(dispersion stabilizer; preparation of resin particles for electrostatic **ink jet** printing oil-based inks)

IT 106-91-2DP, Glycidyl methacrylate, reaction products with carboxy-terminated methacrylate polymers 138005-14-8DP, carboxy-terminated, reaction products with glycidyl methacrylate 139104-87-3P 139104-90-8P 139105-03-6P 139105-08-1P, 3-Mercaptopropionic acid-octadecyl methacrylate telomer, ester with glycidyl methacrylate 139105-12-7P 141414-84-8P 141414-99-5P 141415-72-7P 143709-80-2P 214835-07-1P 215877-54-6P 215877-61-5P 215877-71-7P 217076-83-0P 320784-83-6P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(macromonomer; preparation of resin particles for electrostatic ink jet printing oil-based inks)

IT 324529-97-7P 324529-98-8P 324529-99-9P 324530-00-9P 324530-01-0P 324530-02-1P 324530-03-2P 324530-04-3P 324530-05-4P 324530-06-5P 324530-07-6P 324530-08-7P 324530-09-8P 324530-10-1P 324530-11-2P 324530-12-3P 324530-13-4P 324530-14-5P 324530-15-6P 324530-16-7P 324530-17-8P 324530-18-9P 324530-19-0P 324530-21-4P 324530-29-2P 324753-00-6P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of resin particles for electrostatic ink jet printing oil-based inks)

IT **218459-65-5P**, Butyl methacrylate-divinyl adipate-dodecyl methacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl methacrylate

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

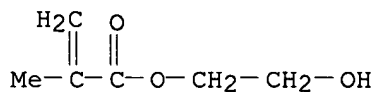
(dispersion stabilizer; preparation of resin particles for electrostatic **ink jet** printing oil-based inks)

RN 218459-65-5 HCAPLUS

CN Hexanedioic acid, diethenyl ester, telomer with butyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate and mercaptoacetic acid, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9  
CMF C6 H10 O3

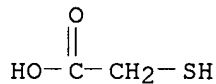


CM 2

CRN 218459-64-4  
CMF (C16 H30 O2 . C10 H14 O4 . C8 H14 O2)x . C2 H4 O2 S

CM 3

CRN 68-11-1  
CMF C2 H4 O2 S

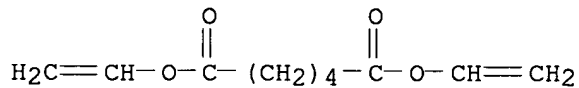


CM 4

CRN 218459-63-3  
CMF (C16 H30 O2 . C10 H14 O4 . C8 H14 O2)x  
CCI PMS

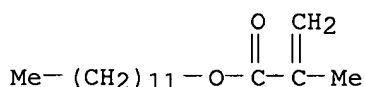
CM 5

CRN 4074-90-2  
CMF C10 H14 O4



CM 6

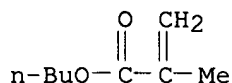
CRN 142-90-5  
CMF C16 H30 O2



CM 7

CRN 97-88-1

CMF C8 H14 O2



L8 ANSWER 18 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2000:817613 HCAPLUS

DN 134:6011

TI Oily ink compositions for electrostatic ink-jet printing with good discharge stability and giving prints having high clearness and adhesion strength

IN Kato, Eiichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 41 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D011-00

ICS B41J002-01; B41M005-00

CC 42-12 (Coatings, Inks, and Related Products)

Section cross-reference(s): 76

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000319564	A2	20001121	JP 2000-68835	20000313
PRAI	JP 1999-65101	A	19990311		

AB The compns. are obtained by dispersing charge-bearing copolymer particles in a nonaq. liquid medium having elec. resistance of >109 Ω·cm and permittivity of <3.5 where the copolymer particles are prepared by the polymerization of (A) amino group-containing addition monomers with (B)

monofunctional

comonomers which are soluble in nonaq. organic solvents and become insol. in the

same solvents after polymerization, in a solution containing a dispersion stabilizer

which is vinylic polymer bearing carboxylated or etherified pendants groups, crosslinked portions and polar terminals. Thus, heating 100 g octadecyl methacrylate and 1.0 g divinylbenzene in the presence of AIBN at 85° gave a copolymer with Mw 3.3+104, 15 g of which (as dispersion stabilizer) was combined with 93 g vinyl acetate, 5 g 2-(N,N-diethylamino)ethyl crotonate and 2 g octadecyl methacrylate in 285 g Isopar H containing 2,2'-azobis(isovaleronitrile) and AIBN and heated from 70-100° over 9 h to give a solution containing a white powder having average particle diameter 0.38 μm. Dispersing 50 g the powder with 18 g a pigment

dispersion containing poly(dodecyl methacrylate), Alkali Blue and Shellsol 71, 0.15 g Co naphthenate and 1 L Isopar E gave an ink with good claimed properties.

- ST org solvent based electrostatic ink jet printing ink; isoalkane medium electrostatic ink jet ink; oil based electrostatic ink jet printing ink; diethylaminoethyl crotonate copolymer charge bearing particle electrostatic ink; divinylbenzene crosslinked copolymer dispersant polymn charge bearing particle
- IT Isoalkanes  
RL: NUU (Other use, unclassified); USES (Uses)  
(C7-10, medium; oil-based ink compns. for electrostatic ink-jet printing with good discharge stability and giving prints having high clearness and adhesion strength)
- IT Isoalkanes  
RL: NUU (Other use, unclassified); USES (Uses)  
(C9-12; oil-based ink compns. for electrostatic ink-jet printing with good discharge stability and giving prints having high clearness and adhesion strength)
- IT Telomers (polymers)  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); PREP (Preparation); USES (Uses)  
(dispersion stabilizer; oil-based ink compns. for electrostatic ink-jet printing with good discharge stability and giving prints having high clearness and adhesion strength)
- IT Inks  
(jet-printing, electrostatic; oil-based ink compns. for electrostatic ink-jet printing with good discharge stability and giving prints having high clearness and adhesion strength)
- IT Dispersing agents  
(oil-based ink compns. for electrostatic ink-jet printing with good discharge stability and giving prints having high clearness and adhesion strength)
- IT Carbon black, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(pigment; oil-based ink compns. for electrostatic ink-jet printing with good discharge stability and giving prints having high clearness and adhesion strength)
- IT 308283-79-6P 308283-80-9P 308283-81-0P 308283-82-1P 308283-83-2P  
**308283-84-3P** 308283-85-4P 308283-86-5P 308283-87-6P  
308283-88-7P 308283-89-8P 308283-91-2P 308283-93-4P 308283-94-5P  
308283-95-6P 308283-97-8P 308283-99-0P 308284-00-6P 308284-02-8P  
308284-04-0P 308284-06-2P 308284-07-3P 308284-08-4P 308284-10-8P  
308284-11-9P 308284-12-0P 308367-83-1P  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(charge-bearing particles; oil-based ink compns. for electrostatic **ink-jet** printing with good discharge stability and giving prints having high clearness and adhesion strength)
- IT 60-24-2DP, 2-Mercaptoethanol, reaction products with crosslinked methacrylate copolymers, esterified with unsatd. carboxylic acids 68-11-1DP, Thioglycolic acid, reaction products with crosslinked methacrylate copolymers 78-67-1DP, AIBN, reaction products with crosslinked methacrylate copolymers 147-93-3DP, 2-Mercaptobenzoic acid, reaction products with crosslinked methacrylate copolymers 147-93-3DP, 2-Mercaptobenzoic acid, reaction products with crosslinked methacrylate copolymers, esterified with hydroxyethyl methacrylate 868-77-9DP, 2-Hydroxyethyl methacrylate, esters with telomers or terminated polymers

2094-98-6DP, 1,1'-Azobis(cyclohexane-1-carbonitrile), reaction products with crosslinked methacrylate copolymers 13472-08-7DP, 2,2'-Azobis(isovaleronitrile), reaction products with crosslinked methacrylate copolymers 27442-52-0DP, reaction products with crosslinked methacrylate copolymers 27442-52-0DP, reaction products with crosslinked methacrylate copolymers, esterified with hydroxyethyl methacrylate 28377-02-8DP, Ethylene glycol dimethacrylate-octadecyl methacrylate copolymer, terminated with polar group formers, ester with 2-hydroxyethyl methacrylate 54335-12-5DP, Ethylene glycol dimethacrylate-hexadecyl methacrylate copolymer, terminated with polar group formers 55428-59-6DP, 2-Mercaptoethyl phosphate, reaction products with crosslinked methacrylate copolymers 59200-46-3DP, reaction products with crosslinked methacrylate copolymers 59200-46-3DP, reaction products with crosslinked methacrylate copolymers, esterified with hydroxyethyl methacrylate 61255-17-2DP, Divinylbenzene-dodecyl methacrylate copolymer, terminated with polar group formers 107533-90-4DP, terminated with polar group formers, ester with 2-hydroxyethyl methacrylate 122324-74-7DP, Divinylbenzene-octadecyl methacrylate copolymer, terminated with polar group formers 122324-74-7DP, Divinylbenzene-octadecyl methacrylate copolymer, terminated with polar group formers, ester with 2-hydroxyethyl methacrylate 128337-98-4DP, reaction products with crosslinked methacrylate copolymers, esterified with hydroxyethyl methacrylate 128905-70-4DP, Pyridine 2-Mercaptoethanesulfonate, reaction products with crosslinked methacrylate copolymers 130805-21-9DP, Divinylbenzene-tridecyl methacrylate copolymer, terminated with polar group formers 130805-26-4DP, Divinylbenzene-hexadecyl methacrylate copolymer, terminated with polar group formers 134140-17-3P, Divinylbenzene-styrene-tetradecyl methacrylate copolymer 134140-19-5DP, Dodecyl methacrylate-trivinylbenzene copolymer, terminated with polar group formers, ester with 2-hydroxyethyl methacrylate 134266-79-8DP, Hexadecyl methacrylate-propylene glycol dimethacrylate copolymer, terminated with polar group formers, ester with 2-hydroxyethyl methacrylate 134266-80-1DP, Ethylene glycol diacrylate-methyl methacrylate-octadecyl methacrylate copolymer, terminated with polar group formers, ester with 2-hydroxyethyl methacrylate 134266-81-2DP, 2-Chloroethyl methacrylate-tridecyl methacrylate-trimethylolpropane trimethacrylate copolymer, terminated with polar group formers, ester with 2-hydroxyethyl methacrylate 148532-67-6DP, Dodecyl methacrylate-octyl methacrylate-trivinylbenzene copolymer, terminated with polar group formers 148532-68-7DP, Butyl methacrylate-ethylene glycol dimethacrylate-octadecyl methacrylate copolymer, terminated with polar group formers **148532-81-4DP**, Divinyl adipate-hexadecyl methacrylate copolymer, terminated with polar group formers 214708-26-6DP, terminated with polar group formers, ester with 2-hydroxyethyl methacrylate 215672-70-1DP, N,N-Dimethylaminoethyl methacrylate-dodecyl methacrylate-ethylene glycol methacrylate vinyl ether copolymer, terminated with polar group formers 215672-72-3DP, Octadecyl methacrylate-triethylene glycol dimethacrylate-2-(trimethoxysilyloxy)ethyl methacrylate copolymer, terminated with polar group formers **218459-63-3DP**, Butyl methacrylate-divinyl adipate-dodecyl methacrylate copolymer, terminated with polar group formers, ester with 2-hydroxyethyl methacrylate 308283-76-3DP, Docosyl methacrylate-polyethylene glycol diacrylate copolymer, terminated with polar group formers 308283-78-5DP, terminated with polar group formers

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

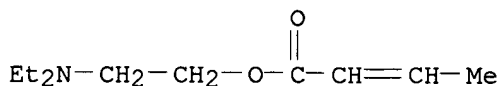
(dispersion stabilizer; oil-based ink compns. for electrostatic **ink-jet** printing with good discharge stability and

- giving prints having high clearness and adhesion strength)
- IT 79-10-7DP, Acrylic acid, ester with telomers 79-41-4DP, Methacrylic acid, reaction products with telomers 598-79-8DP,  $\alpha$ -Chloroacrylic acid, ester with telomers 625-38-7DP, Vinylacetic acid, ester with telomers 1075-49-6DP, 4-Vinylbenzoic acid, ester with telomers 6268-48-0DP, ester with telomers 24615-84-7DP, 2-Carboxyethyl acrylate, ester with telomers 126861-31-2DP, ester with telomers 214772-28-8DP, ester with telomers
- RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); PREP (Preparation); USES (Uses)  
(dispersion stabilizer; oil-based ink compns. for electrostatic ink-jet printing with good discharge stability and giving prints having high clearness and adhesion strength)
- IT 25719-52-2, Poly(dodecyl methacrylate)
- RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
(ink binder; oil-based ink compns. for electrostatic ink-jet printing with good discharge stability and giving prints having high clearness and adhesion strength)
- IT 2580-56-5, Victoria Blue B 68993-80-6, Alkali Blue
- RL: MOA (Modifier or additive use); USES (Uses)  
(pigment; oil-based ink compns. for electrostatic ink-jet printing with good discharge stability and giving prints having high clearness and adhesion strength)
- IT **308283-84-3P**
- RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(charge-bearing particles; oil-based ink compns. for electrostatic **ink-jet** printing with good discharge stability and giving prints having high clearness and adhesion strength)
- RN 308283-84-3 HCAPLUS
- CN Dodecanoic acid, ethenyl ester, polymer with 2-(diethylamino)ethyl 2-butenate and ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 10369-84-3

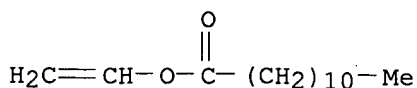
CMF C10 H19 N O2



CM 2

CRN 2146-71-6

CMF C14 H26 O2



CM 3

CRN 108-05-4  
CMF C4 H6 O2



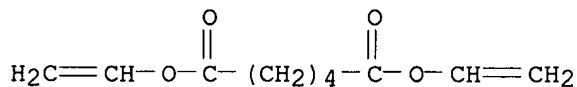
IT **148532-81-4DP**, Divinyl adipate-hexadecyl methacrylate copolymer, terminated with polar group formers **218459-63-3DP**, Butyl methacrylate-divinyl adipate-dodecyl methacrylate copolymer, terminated with polar group formers, ester with 2-hydroxyethyl methacrylate  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
(dispersion stabilizer; oil-based ink compns. for electrostatic **ink-jet** printing with good discharge stability and giving prints having high clearness and adhesion strength)

RN 148532-81-4 HCAPLUS

CN Hexanedioic acid, diethenyl ester, polymer with hexadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

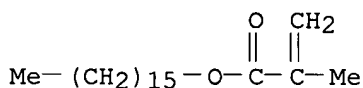
CM 1

CRN 4074-90-2  
CMF C10 H14 O4



CM 2

CRN 2495-27-4  
CMF C20 H38 O2

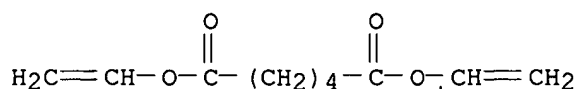


RN 218459-63-3 HCAPLUS

CN Hexanedioic acid, diethenyl ester, polymer with butyl 2-methyl-2-propenoate and dodecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

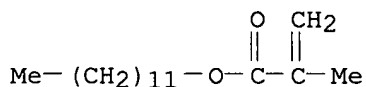
CRN 4074-90-2  
CMF C10 H14 O4



CM 2

CRN 142-90-5

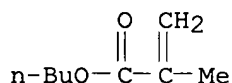
CMF C16 H30 O2



CM 3

CRN 97-88-1

CMF C8 H14 O2



L8 ANSWER 19 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2000:817612 HCAPLUS

DN 134:6010

TI Compositions of oil-based inks for electrostatic ink-jet printing with good discharge stability and giving prints with high clearness and adhesion strength

IN Kato, Eiichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 41 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D011-00

ICS B41J002-01; B41M005-00

CC 42-12 (Coatings, Inks, and Related Products)

Section cross-reference(s): 76

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000319563	A2	20001121	JP 2000-67276	20000310
PRAI	JP 1999-65101	A	19990311		

AB The comps. are obtained by dispersing charge-bearing copolymer particles in a nonaq. liquid medium having elec. resistance of  $>109 \Omega \cdot \text{cm}$  and permittivity of  $<3.5$  where the copolymer particles are prepared by the polymerization of (A) amino group-containing addition monomers with (B) a monofunctional comonomers which are soluble in nonaq. organic solvents and become insol. in the

KATHLEEN FULLER EIC 1700/PARKER LAW 308-4290

same solvents after polymerization, in a solution containing a dispersion stabilizer

which is vinylic polymer bearing pendants containing carboxylate or ether groups and crosslinked portions and being soluble in the solvents. Thus, heating 100 g octadecyl methacrylate and 1.0 g divinylbenzene in the presence of AIBN at 85° gave a copolymer with Mw 3.3+104, 15 g of which (as dispersion stabilizer) was combined with 93 g vinyl acetate, 5 g 2-(N,N-diethylamino)ethyl crotonate and 2 g octadecyl methacrylate in 285 g Isopar H containing 2,2'-azobis(isovaleronitrile) and AIBN and heated from 70-100° over 9 h to give a solution containing a white powder having average particle diameter 0.38 µm. Dispersing 50 g the powder with 18 g a pigment containing 10 g poly(dodecyl methacrylate), 10 g Alkali Blue, 30 g Shellsol 71, 0.15 g Co naphthenate and 1 L Isopar E gave an ink with good claimed properties.

ST org solvent based electrostatic ink jet printing ink; isoalkane medium electrostatic ink jet ink; oil based electrostatic ink jet printing ink; diethylaminoethyl crotonate copolymer charge bearing particle electrostatic ink; divinylbenzene crosslinked copolymer dispersant polymn charge bearing particle

IT Isoalkanes

RL: NUU (Other use, unclassified); USES (Uses)  
(C7-10, medium; oil-based ink compns. for electrostatic ink-jet printing with good discharge stability and giving prints high clearness and adhesion strength)

IT Isoalkanes

RL: NUU (Other use, unclassified); USES (Uses)  
(C9-12, medium; compns. of oil-based inks for electrostatic ink-jet printing with good discharge stability and giving prints high clearness and adhesion strength)

IT Inks

(jet-printing; oil-based ink compns. for electrostatic ink-jet printing with good discharge stability and giving prints high clearness and adhesion strength)

IT Dispersing agents

(oil-based ink compns. for electrostatic ink-jet printing with good discharge stability and giving prints high clearness and adhesion strength)

IT Telomers (polymers)

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); PREP (Preparation); USES (Uses)  
(oil-based ink compns. for electrostatic ink-jet printing with good discharge stability and giving prints high clearness and adhesion strength)

IT Carbon black, uses

RL: MOA (Modifier or additive use); USES (Uses)  
(pigment; oil-based ink compns. for electrostatic ink-jet printing with good discharge stability and giving prints high clearness and adhesion strength)

IT 308283-79-6P 308283-80-9P 308283-81-0P 308283-82-1P  
308283-84-3P 308283-85-4P 308283-86-5P 308283-87-6P  
308283-88-7P 308283-89-8P 308283-91-2P 308283-93-4P 308283-94-5P  
308283-95-6P 308283-97-8P 308283-99-0P 308284-00-6P 308284-02-8P  
308284-04-0P 308284-06-2P 308284-07-3P 308284-08-4P 308284-10-8P  
308284-11-9P 308284-12-0P 308296-57-3P 308367-83-1P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(charge-bearing particles; oil-based ink compns. for electrostatic

- ink-jet** printing with good discharge stability and giving prints high clearness and adhesion strength)
- IT 78-67-1DP, AIBN, reaction products with crosslinked methacrylate copolymers 2094-98-6DP, 1,1'-Azobis(cyclohexane-1-carbonitrile), reaction products with crosslinked methacrylate copolymers 13472-08-7DP, 2,2'-Azobis(isovaleronitrile), reaction products with crosslinked methacrylate copolymers
- RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
- (dispersion stabilizer; compns. of oil-based inks for electrostatic ink-jet printing with good discharge stability and giving prints high clearness and adhesion strength)
- IT 79-10-7DP, Acrylic acid, reaction product with telomers 79-41-4DP, Methacrylic acid, reaction product with telomers 598-79-8DP,  $\alpha$ -Chloroacrylic acid, reaction product with telomers 625-38-7DP, Vinylacetic acid, reaction product with telomers 868-77-9DP, 2-Hydroxyethyl methacrylate, esters with polar group-terminated polymers 1075-49-6DP, 4-Vinylbenzoic acid, reaction product with telomers 6268-48-0DP, reaction product with telomers 24615-84-7DP, 2-Carboxyethyl acrylate, reaction product with telomers 126861-31-2DP, reaction product with telomers 214772-28-8DP, reaction product with telomers
- RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); PREP (Preparation); USES (Uses)
- (dispersion stabilizer; compns. of oil-based inks for electrostatic ink-jet printing with good discharge stability and giving prints high clearness and adhesion strength)
- IT 60-24-2DP, 2-Mercaptoethanol, reaction products with crosslinked methacrylate copolymers, esterified with unsatd. carboxylic acids 68-11-1DP, Thioglycolic acid, reaction products with crosslinked methacrylate copolymers 147-93-3DP, 2-Mercaptobenzoic acid, reaction products with crosslinked methacrylate copolymers 147-93-3DP, 2-Mercaptobenzoic acid, reaction products with crosslinked methacrylate copolymers, esterified with 2-hydroxyethyl methacrylate 27442-52-0DP, reaction products with crosslinked methacrylate copolymers 27442-52-0DP, reaction products with crosslinked methacrylate copolymers, esterified with 2-hydroxyethyl methacrylate 28377-02-8DP, Ethylene glycol dimethacrylate-octadecyl methacrylate copolymer, terminated with polar group formers, ester with 2-hydroxyethyl methacrylate 54335-12-5DP, Ethylene glycol dimethacrylate-hexadecyl methacrylate copolymer, terminated with polar group formers 55428-59-6DP, reaction products with crosslinked methacrylate copolymers 59200-46-3DP, reaction products with crosslinked methacrylate copolymers 59200-46-3DP, reaction products with crosslinked methacrylate copolymers, esterified with 2-hydroxyethyl methacrylate 61255-17-2DP, Divinylbenzene-dodecyl methacrylate copolymer, terminated with polar group formers 107533-90-4DP, terminated with polar group formers, ester with 2-hydroxyethyl methacrylate 122324-74-7DP, Divinylbenzene-octadecyl methacrylate copolymer, terminated with polar group formers, ester with 2-hydroxyethyl methacrylate 128337-98-4DP, reaction products with crosslinked methacrylate copolymers, esterified with 2-hydroxyethyl methacrylate 128905-70-4DP, Pyridine 2-mercaptoethanesulfonate, reaction products with crosslinked methacrylate copolymers 130805-21-9DP, Divinylbenzene-tridecyl methacrylate copolymer, terminated with polar group formers 130805-26-4DP, Divinylbenzene-hexadecyl methacrylate copolymer, terminated with polar group formers 134140-17-3DP, Divinylbenzene-styrene-tetradecyl methacrylate copolymer, terminated with polar group formers, ester with 2-hydroxyethyl methacrylate 134140-19-5DP, Dodecyl methacrylate-trivinylbenzene copolymer, terminated with polar group formers, ester with

2-hydroxyethyl methacrylate 134266-79-8DP, Hexadecyl methacrylate-propylene glycol dimethacrylate copolymer, terminated with polar group formers, ester with 2-hydroxyethyl methacrylate 134266-80-1DP, Ethylene glycol diacrylate-methyl methacrylate-octadecyl methacrylate copolymer, terminated with polar group formers, ester with 2-hydroxyethyl methacrylate 134266-81-2DP, 2-Chloroethyl methacrylate-tridecyl methacrylate-trimethylolpropane trimethacrylate copolymer, terminated with polar group formers, ester with 2-hydroxyethyl methacrylate 148532-67-6DP, Dodecyl methacrylate-octyl methacrylate-trivinylbenzene copolymer, terminated with polar group formers 148532-68-7DP, Butyl methacrylate-ethylene glycol dimethacrylate-octadecyl methacrylate copolymer, terminated with polar group formers **148532-81-4DP**, Divinyl adipate-hexadecyl methacrylate copolymer, terminated with polar group formers 214708-26-6DP, terminated with polar group formers, ester with 2-hydroxyethyl methacrylate 215672-70-1DP, terminated with polar group formers 215672-72-3DP, terminated with polar group formers **218459-63-3DP**, terminated with polar group formers, ester with 2-hydroxyethyl methacrylate 308283-76-3DP, terminated with polar group formers 308283-78-5DP, terminated with polar group formers  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(dispersion stabilizer; oil-based ink compns. for electrostatic **ink-jet** printing with good discharge stability and giving prints high clearness and adhesion strength)

IT 25719-52-2, Poly(dodecyl methacrylate)

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(ink binder; oil-based ink compns. for electrostatic ink-jet printing with good discharge stability and giving prints high clearness and adhesion strength)

IT 2580-56-5, Victoria Blue B 68993-80-6, Alkali Blue

RL: MOA (Modifier or additive use); USES (Uses)

(pigment; oil-based ink compns. for electrostatic ink-jet printing with good discharge stability and giving prints high clearness and adhesion strength)

IT **308283-84-3P**

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(charge-bearing particles; oil-based ink compns. for electrostatic **ink-jet** printing with good discharge stability and giving prints high clearness and adhesion strength)

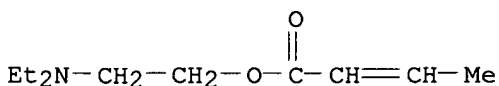
RN 308283-84-3 HCAPLUS

CN Dodecanoic acid, ethenyl ester, polymer with 2-(diethylamino)ethyl 2-butenate and ethenyl acetate (9CI) (CA INDEX NAME)

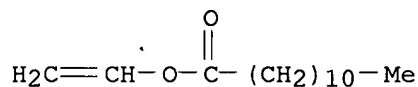
CM 1

CRN 10369-84-3

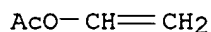
CMF C10 H19 N O2



CM 2

CRN 2146-71-6  
CMF C14 H26 O2

CM 3

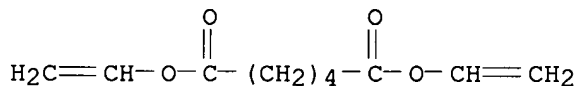
CRN 108-05-4  
CMF C4 H6 O2

IT **148532-81-4DP**, Divinyl adipate-hexadecyl methacrylate copolymer, terminated with polar group formers **218459-63-3DP**, terminated with polar group formers, ester with 2-hydroxyethyl methacrylate  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
 (dispersion stabilizer; oil-based ink compns. for electrostatic **ink-jet** printing with good discharge stability and giving prints high clearness and adhesion strength)

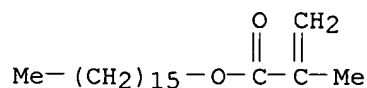
RN 148532-81-4 HCAPLUS

CN Hexanedioic acid, diethenyl ester, polymer with hexadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 4074-90-2  
CMF C10 H14 O4

CM 2

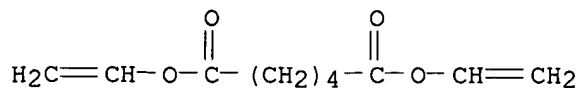
CRN 2495-27-4  
CMF C20 H38 O2

RN 218459-63-3 HCAPLUS

CN Hexanedioic acid, diethenyl ester, polymer with butyl 2-methyl-2-propenoate and dodecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

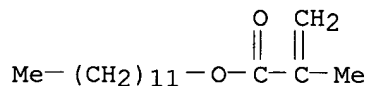
CM 1

CRN 4074-90-2  
CMF C10 H14 O4



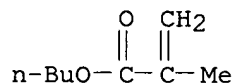
CM 2

CRN 142-90-5  
CMF C16 H30 O2



CM 3

CRN 97-88-1  
CMF C8 H14 O2



L8 ANSWER 20 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
AN 2000:526636 HCAPLUS  
DN 133:127623  
TI Ink-jet printing sheet containing protein particles  
IN Izuhara, Tomoyuki; Tomita, Hirofumi; Take, Seiji; Morizumi, Taigo  
PA Dainippon Printing Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 8 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM B41M005-00  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000211236	A2	20000802	JP 1999-13847	19990122
PRAI	JP 1999-13847		19990122		
AB	The title sheet comprises a sheet substrate coated with a receptive layer				

containing protein particles. The sheet may possess, on a sheet substrate,  $\geq 2$  receptive layers  $\geq 1$  of which contains protein particles.

The sheet shows improved aqueous ink absorption and prevents blocking and set-off when other substrate film and paper are stacked thereon.

ST ink jet printing sheet protein particle

IT Ink-jet recording sheets

(ink-jet printing sheet with ink receiving layer containing protein particles)

IT Proteins, general, uses

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(ink-jet printing sheet with ink receiving layer containing protein particles)

IT 51590-42-2, DA 701

RL: TEM (Technical or engineered material use); USES (Uses)

(ink-jet printing sheet with ink receiving layer containing protein particles)

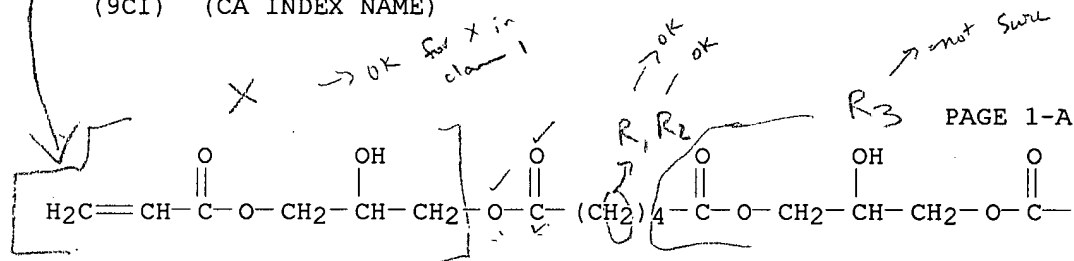
IT 51590-42-2, DA 701

RL: TEM (Technical or engineered material use); USES (Uses)

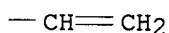
(ink-jet printing sheet with ink receiving layer containing protein particles)

RN 51590-42-2 HCAPLUS

CN Hexanedioic acid, bis[2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propyl] ester (9CI) (CA INDEX NAME)



PAGE 1-B



L8 ANSWER 21 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2000:470334 HCAPLUS

DN 133:96830

TI Ink-jet printing sheet for aqueous ink

IN Takeshi, Seiji; Morisumi, Taigo; Izuhara, Tomoyuki; Tomita, Hirofumi

PA Dainippon Printing Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM B41M005-00

ICS C08F002-44; C08F002-54

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.

KIND DATE

APPLICATION NO. DATE

PI JP 2000190623 A2 20000711 JP 1998-369673 19981225  
 PRAI JP 1998-369673 19981225

AB The ink-jet printing sheet has an ink-receptive layer on a substrate sheet, wherein the ink-receptive layer is formed by coating a solution containing  
 an ionizing radiation sensitive hydrophilic multi-functionalized monomer and/or an oligomer of the ionizing radiation sensitive hydrophilic multi-functionalized monomer and hardening the coating by ionizing radiation. The printing sheet shows the excellent ink-absorption, ink-drying, and water-resistance.

ST ink jet printing sheet aq ink

IT Ink-jet recording sheets

Ionizing radiation

(ink-jet printing sheet for aqueous ink)

IT Acrylic polymers, preparation

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(ionizing radiation sensitive; ink-jet printing sheet for aqueous ink)

IT Quaternary ammonium compounds, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(polymers; ink-jet printing sheet for aqueous ink)

IT 1830-78-0 9003-39-8, K 90 51590-42-2, Denacol DA 701

90802-83-8, Denacol DA 314 281198-16-1, B 3000B

RL: TEM (Technical or engineered material use); USES (Uses)

(ink-jet printing sheet for aqueous ink)

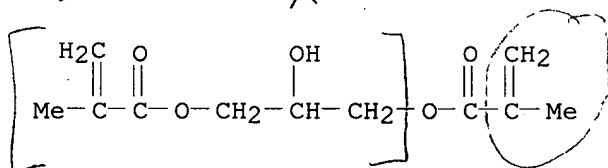
IT 1830-78-0 51590-42-2, Denacol DA 701

RL: TEM (Technical or engineered material use); USES (Uses)

(ink-jet printing sheet for aqueous ink)

RN 1830-78-0 HCAPLUS

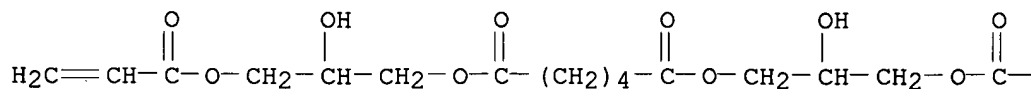
CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-1,3-propanediyl ester (9CI) (CA INDEX NAME)



RN 51590-42-2 HCAPLUS

CN Hexanedioic acid, bis[2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

—CH=CH<sub>2</sub>

L8 ANSWER 22 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 2000:121785 HCAPLUS  
 DN 132:173424  
 TI Ink-jet recording sheet containing poly(vinyl alcohol)derivative and recording method  
 IN Nakamura, Yoshisada; Shibahara, Yoshihiko  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 17 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM B41M005-00  
 ICS B41M005-00; B41J002-01  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000052646	A2	2000 Feb 22	JP 1999-158375	19990604
PRAI	JP 1998-157747		19980605		

AB The sheet possesses, on a support, an ink-fixing layer containing either (1) a modified poly(vinyl alc.)  $[\text{CH}_2\text{CH}(\text{OH})]_n[\text{CH}_2\text{CH}(\text{OCOMe})]_m[\text{CH}_2\text{CH}(\text{OCOCH}_2\text{COMe})]_l$  [ $l = 0.1\text{-}20 \text{ mol}\%$ ;  $m + n = 80\text{-}99.9 \text{ mol}\%$ ;  $0.85 < n/(m + n) < 1$ ] and unmodified poly(vinyl alc.) with saponification degree 60-85% or (2) only the modified poly(vinyl alc.) [ $l = 0.1\text{-}20 \text{ mol}\%$ ;  $m + n = 80\text{-}99.9 \text{ mol}\%$ ;  $0.6 \leq n/(m + n) \leq 0.85$ ]. The title process comprises a step of imagewise attaching and fixing an aqueous ink to the sheet. The sheet suited for use in newly improved ink-jet printers provides high quality images with high resolution, graininess, and color tone and shows high film strength.

ST ink jet recording sheet polyvinyl alc

IT Ink-jet recording sheets

(ink-jet printing sheet containing poly(vinyl alc.) derivative)

IT 9002-89-5, Poly(vinyl alcohol) **259104-51-3**

RL: TEM (Technical or engineered material use); USES (Uses)

(ink-jet printing sheet containing poly(vinyl alc.) derivative)

IT **259104-51-3**

RL: TEM (Technical or engineered material use); USES (Uses)

(ink-jet printing sheet containing poly(vinyl alc.) derivative)

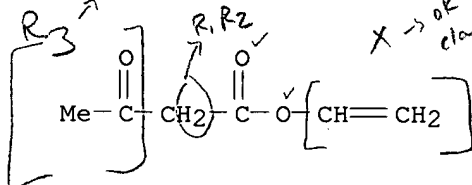
RN 259104-51-3 HCAPLUS

CN Butanoic acid, 3-oxo-, ethenyl ester, polymer with ethenol and ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 2424-97-7

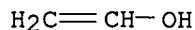
CMF C6 H8 O3



CM 2

CRN 557-75-5

CMF C2 H4 O



CM 3

CRN 108-05-4

CMF C4 H6 O2



L8 ANSWER 23 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 1999:748557 HCAPLUS  
 DN 131:358296  
 TI Digital direct-imaging lithographic plate using anodized aluminum substrate  
 IN Urano, Toshiyoshi; Hino, Etsuko  
 PA Mitsubishi Chemical Industries Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM B41N001-08  
 ICS B41M005-00; G03F007-00  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11321142	A2	19991124	JP 1998-131593	19980514
PRAI	JP 1998-131593		19980514		
AB	In the lithog. plate manufactured by forming ink images by jetting ink through an orifice on a coarsened and anodized Al substrate, the substrate has average surface roughness (Ra) 0.3-0.9 μm and anodized film weight 5-40 mg/dm <sup>2</sup> . The lithog. plate shows good printing durability and gives prints without stains.				
ST	lithog plate anodized film aluminum substrate; ink jet printing image lithog plate				
IT	Ink-jet printing Lithographic plates (lithog. plate having anodized aluminum substrate and ink image formed by ink-jet process)				
IT	25232-36-4, Vinyl acetate-vinyl pivalate copolymer 26936-24-3, Methacrylic acid-methyl acrylate-methyl methacrylate copolymer 68541-74-2 122083-53-8, Methacrylic acid-methyl acrylate-methyl methacrylate-trimethylolpropane triacrylate copolymer 168203-54-1, Isobutyl acrylate-isobutyl methacrylate-4-hydroxybutyl				

acrylate-methacrylic acid-methyl methacrylate copolymer

RL: DEV (Device component use); USES (Uses)

(lithog. plate having anodized aluminum substrate and ink image formed by **ink-jet** process)

IT 7429-90-5, Aluminum, processes

RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(lithog. plate having anodized aluminum substrate and ink image formed by ink-jet process)

IT 250341-81-2

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(lithog. plate having anodized aluminum substrate and ink image formed by ink-jet process)

IT 25232-36-4, Vinyl acetate-vinyl pivalate copolymer

RL: DEV (Device component use); USES (Uses)

(lithog. plate having anodized aluminum substrate and ink image formed by **ink-jet** process)

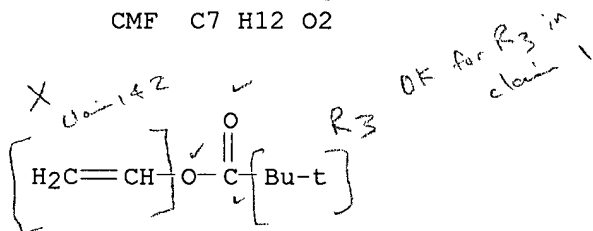
RN 25232-36-4 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, ethenyl ester, polymer with ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 3377-92-2

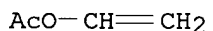
CMF C7 H12 O2



CM 2

CRN 108-05-4

CMF C4 H6 O2



L8 ANSWER 24 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1999:633567 HCAPLUS

DN 131:273246

TI Oil-based inks for making printing plates by ink-jet printing method and their use in the formation of the plates

IN Kato, Eiichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 35 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D011-00

ICS B41C001-10; B41J002-01; B41N001-14

CC 42-11 (Coatings, Inks, and Related Products)

## Section cross-reference(s): 74

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11269416	A2	19991005	JP 1998-359379	19981217
	US 6098545	A	20000808	US 1998-215837	19981217
PRAI	JP 1997-349737	A	19971218		

AB The inks with good storage stability and printability are used on water-resistant lithog. printing plates which bear an image-receiving layer containing binding resins and ZnO and have a water contact angle of  $\geq 30^\circ$ , and contain dispersed resin particles (A) which are prepared by polymerizing monofunctional monomers with macromonomers and polymerizable dispersants having double bonds in a nonaq. medium having elec. resistance  $\geq 109 \Omega \cdot \text{cm}$  and permittivity  $\leq 3.5$ . The plates are formed by ink-jet printing using the inks, and desensitizing the unprinted areas. Thus, a dispersion containing particles (A) was prepared by the 2,2'-azobis(isovaleronitrile)-initiated polymerization of vinyl acetate 100 with a macromonomer 4 in the presence of a polymerizable dispersant 10 g where the macromonomer was octadecyl methacrylate-3-mercaptopropionic acid telomer glycidyl methacrylate ester and the dispersant was an allyl ether of octadecyl methacrylate-4-(2-methacryloyloxyethyloxycarbonyl)butyric acid copolymer. A plate precursor was coated with a mixture of ZnO 100, methacrylic acid-Me acrylate-Me methacrylate copolymer 3.0, acrylic acid-dodecyl acrylate-Me methacrylate-N-vinyl-2-pyrrolidone copolymer 17.0, benzoic acid 0.15 and PhMe 155 g to form a plate bearing an ink-receiving layer with water contact angle  $102^\circ$ . An ink composition was formed by shaking an acrylic acid-dodecyl methacrylate copolymer 10 with Alkali Blue 10 and Shellsol 71 30 in the presence of glass beads, then combined at 18 g with the particles (A) 50, and an octadecene-semi-maleic acid octadecylamide copolymer 0.09 g in 1 L Isopar G.

ST ink jet printing plate manuf oil based ink; macromonomer vinyl copolymer dispersion oil based ink; reactive dispersant binder oil based ink printing plate; lithog printing plate manuf ink jet ink

IT Isoalkanes

RL: NUU (Other use, unclassified); USES (Uses)

(C9-12, Isopar G, Isopar H, ink medium; manufacture of oil-based inks for making printing plates by ink-jet printing method and use in formation of plates)

IT Inks

(jet-printing; oil-based inks for making printing plates by ink-jet printing method and use in formation of plates)

IT Macromonomers

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(manufacture of oil-based inks for making printing plates by ink-jet printing method and use in formation of plates)

IT Ink-jet printing

Lithographic plates

(oil-based inks for making printing plates by ink-jet printing method and use in formation of plates)

IT Dispersing agents

(reactive; in manufacture of oil-based inks for making printing plates by ink-jet printing method and use in formation of plates)

IT 245492-45-9, Octadecyl vinyl ether-maleic monooctadecylamide copolymer  
245669-01-6, Octadecene-maleic monooctadecylamide copolymer

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

- (co-binder; manufacture of oil-based inks for making printing plates by ink-jet printing method and use in formation of plates)
- IT 25719-52-2, Dodecyl methacrylate polymer 28062-60-4, Acrylic acid-dodecyl methacrylate copolymer  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ink co-binder; manufacture of oil-based inks for making printing plates by ink-jet printing method and use in formation of plates)
- IT 2580-56-5, Victoria Blue B  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ink color; manufacture of oil-based inks for making printing plates by ink-jet printing method and use in formation of plates)
- IT 8005-03-6, Nigrosine 68993-80-6, Alkali Blue  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ink composition; manufacture of oil-based inks for making printing plates by ink-jet printing method and use in formation of plates)
- IT 245492-19-7 245492-20-0 **245492-21-1** 245492-22-2  
 245492-24-4 **245492-25-5**  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (latex binder; manufacture of oil-based inks for making printing plates by ink-jet printing method and use in formation of plates)
- IT 106-91-2DP, Glycidyl methacrylate, ester with carboxy-terminated dihexanoyloxypropyl methacrylate polymer 138005-14-8DP, 2,3-Dihexanoyloxypropyl methacrylate homopolymer, carboxy-terminated, ester with glycidyl methacrylate 139104-87-3P 139104-90-8P 139105-03-6P 139105-08-1P, Octadecyl methacrylate-3-mercaptopropionic acid telomer glycidyl methacrylate ester 139105-12-7P 147130-31-2P 147130-40-3P 147130-42-5P 147130-44-7P 147130-50-5P 214835-07-1P 215877-54-6P, Tetradecyl methacrylate-thioethanol telomer ester with 2-carboxyethyl acrylate 215877-61-5P 215877-71-7P 217188-65-3P  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (macromonomers; manufacture of oil-based inks for making printing plates by ink-jet printing method and use in formation of plates)
- IT 245492-26-6 245492-27-7 245492-29-9 245492-30-2 245492-31-3  
 245492-32-4 245492-34-6 **245492-35-7** 245492-36-8  
 245492-39-1 245492-41-5 245492-42-6 245492-44-8  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (manufacture of oil-based inks for making printing plates by ink-jet printing method and use in formation of plates)
- IT 104922-28-3P, Octadecyl methacrylate-4-(2-methacryloyloxyethoxycarbonyl) butyric acid copolymer allyl ester 220728-45-0P, 11-Methacrylamidoundecanoic acid-tridecyl methacrylate copolymer ester with vinyl acetate 220728-51-8P 221654-03-1P, Dodecyl methacrylate-octadecyl acrylate-glycidyl methacrylate copolymer ester with 3-acryloyloxypropionic acid  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (reactive dispersant; manufacture of oil-based inks for making printing plates by ink-jet printing method and use in formation of plates)
- IT 26936-24-3, Methacrylic acid-methyl acrylate-methyl methacrylate copolymer 27233-87-0, Methyl acrylate-methyl methacrylate-styrene copolymer 60472-57-3, Methacrylic acid-methyl acrylate-methyl methacrylate-styrene copolymer 184970-55-6, Acrylic acid-dodecyl acrylate-methyl methacrylate-N-vinyl-2-pyrrolidone copolymer 245492-46-0, Acrylic

acid-N-methylacrylamide-methyl acrylate-methyl methacrylate copolymer  
245492-47-1, Acrylic acid-Macromonomer AA 6-ethylene glycol dimethacrylate  
graft copolymer

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or  
engineered material use); USES (Uses)

(receiving layer composition; manufacture of oil-based inks for making  
printing

plates by ink-jet printing method and use in formation of plates)

IT 1314-13-2, Zinc oxide, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(receiving layer composition; manufacture of oil-based inks for making  
printing

plates by ink-jet printing method and use in formation of plates)

IT 245492-21-1 245492-25-5

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or  
engineered material use); USES (Uses)

(latex binder; manufacture of oil-based inks for making printing plates by  
**ink-jet** printing method and use in formation of  
plates)

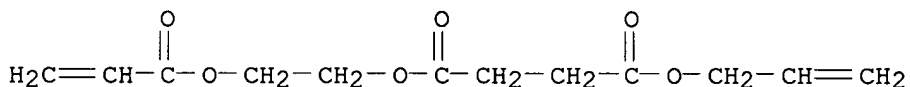
RN 245492-21-1 HCAPLUS

CN Butanedioic acid, 2-[(1-oxo-2-propenyl)oxy]ethyl 2-propenyl ester, polymer  
with ethenyl acetate, ethenyl propanoate, hexadecyl 2-methyl-2-propenoate  
and octadecyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 220728-50-7

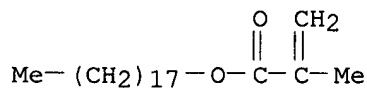
CMF C12 H16 O6



CM 2

CRN 32360-05-7

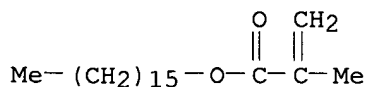
CMF C22 H42 O2



CM 3

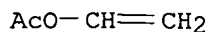
CRN 2495-27-4

CMF C20 H38 O2



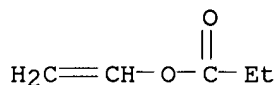
CM 4

CRN 108-05-4  
CMF C4 H6 O2



CM 5

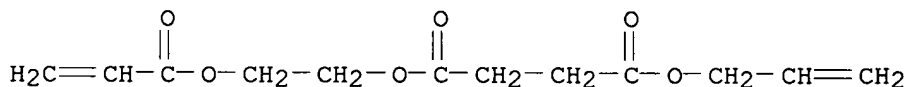
CRN 105-38-4  
CMF C5 H8 O2



RN 245492-25-5 HCAPLUS  
CN Butanedioic acid, 2-[(1-oxo-2-propenyl)oxy]ethyl 2-propenyl ester, polymer with 3-butenic acid, ethenyl acetate, ethenyl butanoate, hexadecyl 2-methyl-2-propenoate and 1-(2-propenyl)-1,2-ethanediyl diheptanoate, graft (9CI) (CA INDEX NAME)

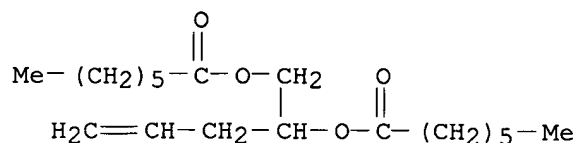
CM 1

CRN 220728-50-7  
CMF C12 H16 O6



CM 2

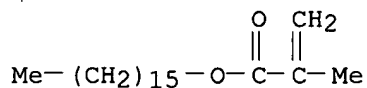
CRN 138114-75-7  
CMF C19 H34 O4



CM 3

CRN 2495-27-4

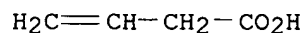
CMF C20 H38 O2



CM 4

CRN 625-38-7

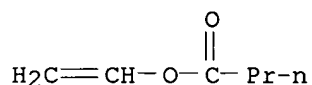
CMF C4 H6 O2



CM 5

CRN 123-20-6

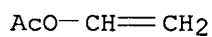
CMF C6 H10 O2



CM 6

CRN 108-05-4

CMF C4 H6 O2



IT **245492-35-7**

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(manufacture of oil-based inks for making printing plates by **ink-jet** printing method and use in formation of plates)

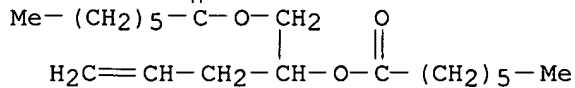
RN 245492-35-7 HCAPLUS

CN Undecanoic acid, 11-[(2-methyl-1-oxo-2-propenyl)amino]-, polymer with ethenyl acetate, ethenylbenzene, ethenyl propanoate, 1-(2-propenyl)-1,2-ethanediy diheptanoate and tridecyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 138114-75-7

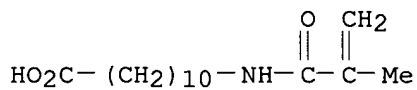
CMF C19 H34 O4



CM 2

CRN 59178-93-7

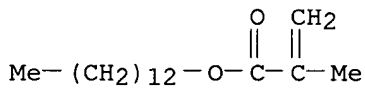
CMF C15 H27 N O3



CM 3

CRN 2495-25-2

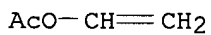
CMF C17 H32 O2



CM 4

CRN 108-05-4

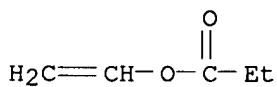
CMF C4 H6 O2



CM 5

CRN 105-38-4

CMF C5 H8 O2



CM 6

CRN 100-42-5

CMF C8 H8

 $\text{H}_2\text{C}=\text{CH}-\text{Ph}$ 

L8 ANSWER 25 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 1999:633566 HCAPLUS  
 DN 131:273256  
 TI Oil-based ink-jet inks for platemaking and platemaking method  
 IN Kato, Eiichi  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 33 pp.  
 CODEN: JKXXAF

DT Patent  
 LA Japanese  
 IC ICM C09D011-00  
 ICS B41C001-10; B41J002-01  
 CC 42-12 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 74

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11269415	A2	19991005	JP 1998-359378	19981217
	US 6133341	A	20001017	US 1998-215010	19981217
PRAI	JP 1997-349736	A	19971218		

AB Title inks, which are used to print images, by ink-jet method, on a lithog. plate comprising a hydrophilic surface and a water-resistant support, comprise a non-aqueous vehicle liquid having elec. resistance >109  $\Omega\text{cm}$  and dielec. constant <3.5 and resin particles dispersed in the vehicle liquid, where the resin particles are formed by polymerization of double

bond-containing monomers and macromonomers in a nonaq. medium.

ST ink lithog platemaking macromonomer

IT Isoalkanes

RL: TEM (Technical or engineered material use); USES (Uses)  
 (C9-12; oil-based ink-jet inks for platemaking)

IT Inks

(jet-printing; oil-based ink-jet inks for platemaking)

IT Inks

(lithog.; oil-based ink-jet inks for platemaking and platemaking method)

IT Lithographic plates

(oil-based ink-jet inks for platemaking and platemaking method)

IT Macromonomers

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(preparation of macromonomers for oil-based ink-jet inks for platemaking)

IT 25719-52-2, Dodecyl methacrylate homopolymer 28062-60-4, Acrylic acid-dodecyl methacrylate copolymer

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(oil-based ink-jet inks for platemaking)

IT 104922-28-3P 139104-87-3P, Dodecyl methacrylate-3-mercaptopropionic acid telomer, ester with glycidyl methacrylate 139104-90-8P, Hexadecyl methacrylate-3-mercaptopropionic acid telomer, ester with glycidyl methacrylate 139105-03-6P 139105-08-1P, Octadecyl methacrylate-3-

mercaptopropionic acid telomer, ester with glycidyl methacrylate  
 139105-12-7P, Tridecyl methacrylate-3-mercaptopropionic acid telomer,  
 ester with glycidyl methacrylate 147130-31-2P 147130-40-3P  
 147130-42-5P 147130-44-7P 147130-50-5P 214835-07-1P 215877-54-6P  
 215877-61-5P 215877-71-7P 217188-65-3P 220728-45-0P 220728-51-8P  
 221654-03-1P, Dodecyl methacrylate-glycidyl methacrylate-octadecyl  
 acrylate copolymer ester with acryloyloxypropionic acid 245547-82-4P  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT  
 (Reactant or reagent)

(preparation of macromonomers for oil-based ink-jet inks for platemaking)

IT 245492-19-7P 245492-20-0P **245492-21-1P** 245492-22-2P  
 245492-24-4P **245492-25-5P** 245492-26-6P 245492-27-7P  
 245492-29-9P 245492-30-2P 245492-31-3P 245492-34-6P  
**245492-35-7P** 245492-36-8P 245492-39-1P 245492-41-5P  
 245492-44-8P 245538-76-5P 245538-79-8P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM  
 (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (preparation of resin particles for oil-based **ink-jet**  
 inks for platemaking)

IT **245492-21-1P 245492-25-5P 245492-35-7P**

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM  
 (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (preparation of resin particles for oil-based **ink-jet**  
 inks for platemaking)

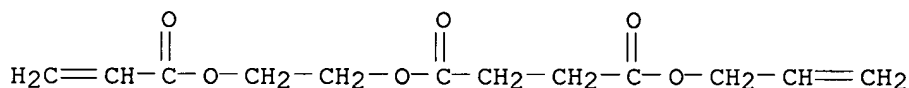
RN 245492-21-1 HCAPLUS

CN Butanedioic acid, 2-[(1-oxo-2-propenyl)oxy]ethyl 2-propenyl ester, polymer  
 with ethenyl acetate, ethenyl propanoate, hexadecyl 2-methyl-2-propenoate  
 and octadecyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 220728-50-7

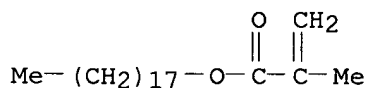
CMF C12 H16 O6



CM 2

CRN 32360-05-7

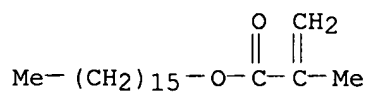
CMF C22 H42 O2



CM 3

CRN 2495-27-4

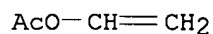
CMF C20 H38 O2



CM 4

CRN 108-05-4

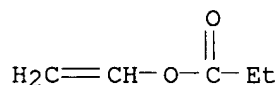
CMF C4 H6 O2



CM 5

CRN 105-38-4

CMF C5 H8 O2



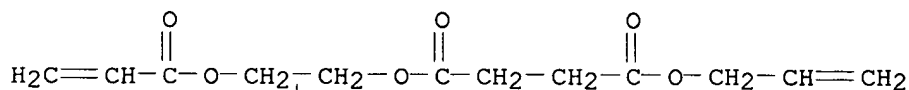
RN 245492-25-5 HCAPLUS

CN Butanedioic acid, 2-[(1-oxo-2-propenyl)oxy]ethyl 2-propenyl ester, polymer with 3-butenic acid, ethenyl acetate, ethenyl butanoate, hexadecyl 2-methyl-2-propenoate and 1-(2-propenyl)-1,2-ethanediyl diheptanoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 220728-50-7

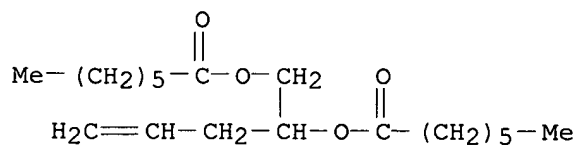
CMF C12 H16 O6



CM 2

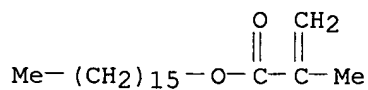
CRN 138114-75-7

CMF C19 H34 O4



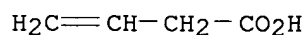
CM 3

CRN 2495-27-4  
CMF C20 H38 O2



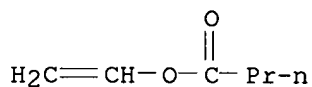
CM 4

CRN 625-38-7  
CMF C4 H6 O2



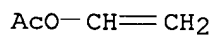
CM 5

CRN 123-20-6  
CMF C6 H10 O2



CM 6

CRN 108-05-4  
CMF C4 H6 O2

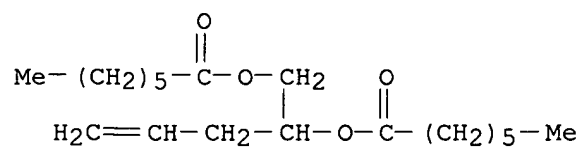


RN 245492-35-7 HCAPLUS

CN Undecanoic acid, 11-[(2-methyl-1-oxo-2-propenyl)amino]-, polymer with ethenyl acetate, ethenylbenzene, ethenyl propanoate, 1-(2-propenyl)-1,2-ethanediyl diheptanoate and tridecyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

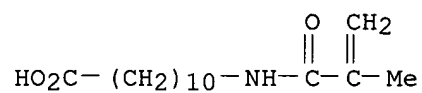
CRN 138114-75-7  
CMF C19 H34 O4



CM 2

CRN 59178-93-7

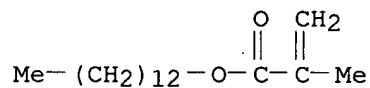
CMF C15 H27 N O3



CM 3

CRN 2495-25-2

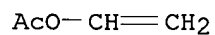
CMF C17 H32 O2



CM 4

CRN 108-05-4

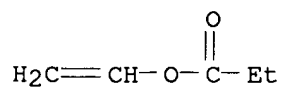
CMF C4 H6 O2



CM 5

CRN 105-38-4

CMF C5 H8 O2



CM 6

CRN 100-42-5

CMF C8 H8

 $\text{H}_2\text{C}=\text{CH}-\text{Ph}$ 

L8 ANSWER 26 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 1999:224584 HCAPLUS  
 DN 130:313305  
 TI Oil-based ink and lithographic plate for the ink jet printing  
 IN Kato, Eiichi  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 38 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D011-02  
 ICS B41C001-10; B41J002-01; B41M005-00; B41N003-08  
 CC 42-11 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 74

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11092705	A2	19990406	JP 1997-253509	19970918
PRAI	JP 1997-253509		19970918		

AB Title plate with good storage property and washing resistance is manufactured from a lithog. plate containing an image accepting layer of zinc oxide and adhesive, on which an image is formed by ink-jet printing with a resin particle nonaq. dispersion prepared by polymerization of a soluble monomer and

a comonomer with  $\geq \text{C}_8$  soluble side chain, followed by a chemical treatment on the non-image portion. Thus, on a lithog. plate an adhesive resin (acrylic acid-Me acrylate-Me methacrylate copolymer) was coated, the an oil-based ink from dodecyl methacrylate/acrylic acid copolymer-alkali blue dispersion and poly(vinyl acetate) latex particle (prepared in the presence of a comb-type dispersion-stable resin) was used for ink-jet printing to give a fixed image, which was treated with ELP-E2 solution to give a storage-stable lithog. plate.

ST lithog plate ink jet printing

IT Macromonomers

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(in oil-based ink and lithog. plate for ink jet printing)

IT Ink-jet printing

Lithographic plates

(oil-based ink and lithog. plate for ink jet printing)

IT 27155-22-2, Acrylic acid-methyl acrylate-methyl methacrylate copolymer  
 27233-87-0, Methyl acrylate-methyl methacrylate-styrene copolymer  
 60472-59-5, Acrylic acid-methyl acrylate-methyl methacrylate-styrene copolymer 223522-24-5 223522-25-6

RL: TEM (Technical or engineered material use); USES (Uses)

(adhesive resin; oil-based ink and lithog. plate for ink jet printing)

IT 25719-52-2P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

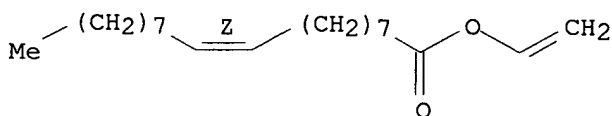
(comb, dispersant; oil-based ink and lithog. plate for ink jet printing)

- IT 134436-95-6P 138114-49-5P 212135-87-0P 214674-48-3P 214674-49-4P  
 215510-39-7P 223601-99-8P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (dispersant; oil-based ink and lithog. plate for ink jet printing)
- IT 28062-60-4  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (in oil-based ink and lithog. plate for ink jet printing)
- IT 9003-20-7P, Vinyl acetate polymer 9003-96-7P 9011-87-4P, Methyl methacrylate-methyl acrylate copolymer **25038-00-0P**  
 25213-29-0P, Vinyl acetate-styrene copolymer 25609-89-6P, Vinyl acetate-crotonic acid copolymer **26715-83-3P**, Vinyl acetate-vinyl propionate copolymer 161641-25-4P, Methyl acrylate-methyl methacrylate-octadecyl acrylate copolymer 212839-66-2P 212839-69-5P 212839-72-0P **212839-73-1P** 212839-74-2P 213263-27-5P 213263-32-2P 215672-85-8P 216878-49-8P 216878-60-3P 223522-22-3P 223522-23-4P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (latex particle; oil-based ink and lithog. plate for ink jet printing)
- IT **139038-03-2P 213547-33-2P 213547-35-4P**  
**223521-88-8P 223521-89-9P 223521-90-2P**  
**223521-91-3P 223521-92-4P 223521-93-5P**  
**223521-94-6P 223521-95-7P 223521-96-8P**  
**223521-97-9P 223521-98-0P 223522-00-7P**  
**223522-01-8P** 223522-03-0P 223522-04-1P 223522-06-3P 223522-08-5P  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (macromonomer; oil-based ink and lithog. plate for ink jet printing)
- IT 215510-34-2P 215510-37-5P 223601-97-6P 223601-98-7P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (oil-based ink and lithog. plate for ink jet printing)
- IT **25038-00-0P 26715-83-3P**, Vinyl acetate-vinyl propionate copolymer **212839-73-1P**  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (latex particle; oil-based ink and lithog. plate for ink jet printing)
- RN 25038-00-0 HCAPLUS
- CN 9-Octadecenoic acid (9Z)-, ethenyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 3896-58-0  
 CMF C20 H36 O2

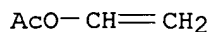
Double bond geometry as shown.



RN 26715-83-3 HCAPLUS  
 CN Propanoic acid, ethenyl ester, polymer with ethenyl acetate (9CI) (CA INDEX NAME)

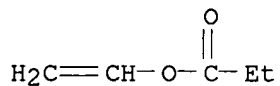
CM 1

CRN 108-05-4  
 CMF C4 H6 O2



CM 2

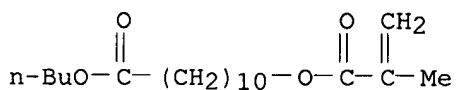
CRN 105-38-4  
 CMF C5 H8 O2



RN 212839-73-1 HCAPLUS  
 CN Undecanoic acid, 11-[(2-methyl-1-oxo-2-propenyl)oxy]-, butyl ester, polymer with ethenyl acetate, ethenylbenzene and ethenyl propanoate (9CI) (CA INDEX NAME)

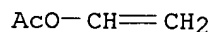
CM 1

CRN 212122-29-7  
 CMF C19 H34 O4



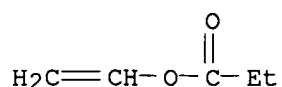
CM 2

CRN 108-05-4  
 CMF C4 H6 O2



CM 3

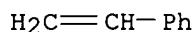
CRN 105-38-4  
 CMF C5 H8 O2



CM 4

CRN 100-42-5

CMF C8 H8



IT 139038-03-2P 213547-33-2P 213547-35-4P  
 223521-88-8P 223521-89-9P 223521-90-2P  
 223521-91-3P 223521-92-4P 223521-93-5P  
 223521-94-6P 223521-95-7P 223521-96-8P  
 223521-97-9P 223521-98-0P 223522-00-7P  
 223522-01-8P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT  
 (Reactant or reagent)

(macromonomer; oil-based ink and lithog. plate for **ink**  
**jet** printing)

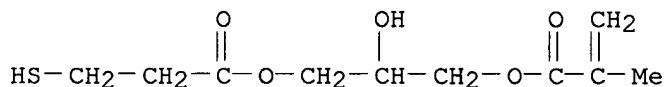
RN 139038-03-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl  
 ester, telomer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0

CMF C10 H16 O5 S



CM 2

CRN 9011-14-7

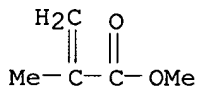
CMF (C5 H8 O2)x

CCI PMS

CM 3

CRN 80-62-6

CMF C5 H8 O2



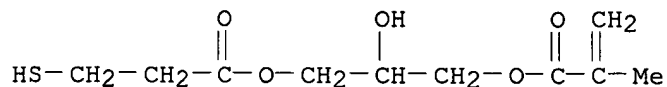
RN 213547-33-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl ester, telomer with octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0

CMF C10 H16 O5 S



CM 2

CRN 25639-21-8

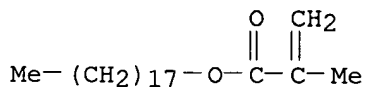
CMF (C22 H42 O2)x

CCI PMS

CM 3

CRN 32360-05-7

CMF C22 H42 O2



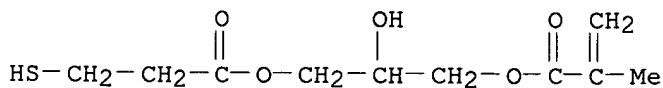
RN 213547-35-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, telomer with 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0

CMF C10 H16 O5 S



CM 2

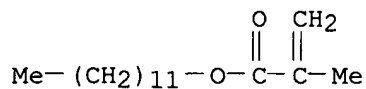
CRN 25719-52-2

CMF (C16 H30 O2)x

CCI PMS

CM 3

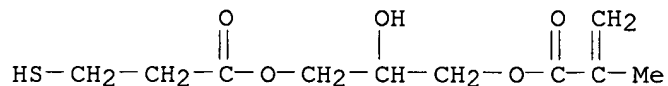
CRN 142-90-5  
CMF C16 H30 O2



RN 223521-88-8 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, butyl ester, telomer with  
2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate (9CI)  
(CA INDEX NAME)

CM 1

CRN 125571-36-0  
CMF C10 H16 O5 S

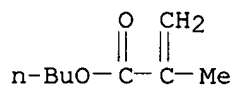


CM 2

CRN 9003-63-8  
CMF (C8 H14 O2)x  
CCI PMS

CM 3

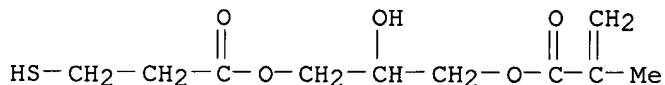
CRN 97-88-1  
CMF C8 H14 O2



RN 223521-89-9 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl  
ester, telomer with ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0  
CMF C10 H16 O5 S

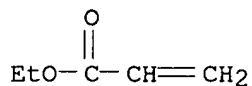


CM 2

CRN 9003-32-1  
CMF (C5 H8 O2) x  
CCI PMS

CM 3

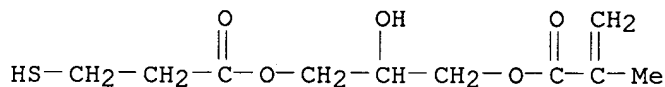
CRN 140-88-5  
CMF C5 H8 O2



RN 223521-90-2 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl ester, telomer with tridecyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0  
CMF C10 H16 O5 S

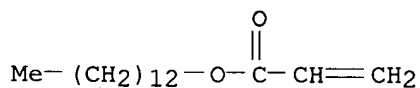


CM 2

CRN 77756-42-4  
CMF (C16 H30 O2) x  
CCI PMS

CM 3

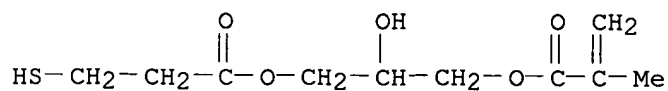
CRN 3076-04-8  
CMF C16 H30 O2



RN 223521-91-3 HCAPLUS  
CN 2-Butenoic acid, decyl ester, telomer with 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0  
CMF C10 H16 O5 S

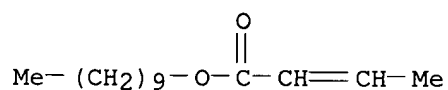


CM 2

CRN 138114-93-9  
CMF (C14 H26 O2) x  
CCI PMS

CM 3

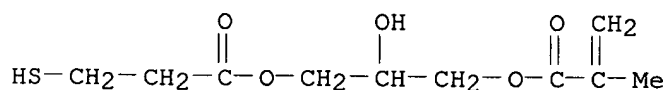
CRN 45176-18-9  
CMF C14 H26 O2



RN 223521-92-4 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 3-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl ester, telomer with phenyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0  
CMF C10 H16 O5 S

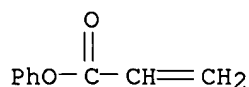


CM 2

CRN 28133-04-2  
CMF (C9 H8 O2) x  
CCI PMS

CM 3

CRN 937-41-7  
CMF C9 H8 O2



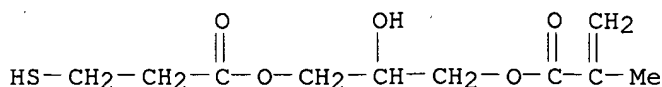
RN 223521-93-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2,3-bis(acetyloxy)propyl ester, telomer with  
2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate (9CI)  
(CA INDEX NAME)

CM 1

CRN 125571-36-0

CMF C10 H16 O5 S



CM 2

CRN 138005-06-8

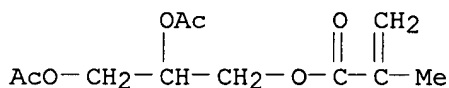
CMF (C11 H16 O6) x

CCI PMS

CM 3

CRN 29601-68-1

CMF C11 H16 O6



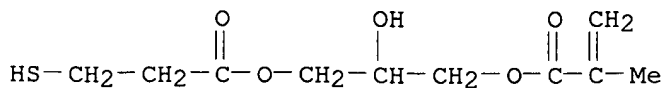
RN 223521-94-6 HCAPLUS

CN Decanoic acid, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, telomer with  
2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate (9CI)  
(CA INDEX NAME)

CM 1

CRN 125571-36-0

CMF C10 H16 O5 S

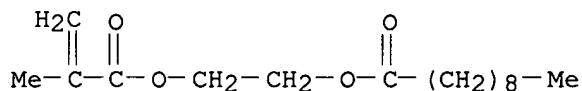


CM 2

CRN 138114-86-0  
CMF (C16 H28 O4) x  
CCI PMS

CM 3

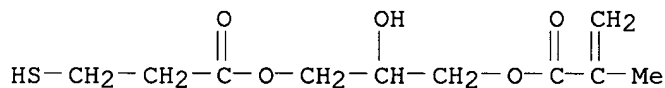
CRN 14792-62-2  
CMF C16 H28 O4



RN 223521-95-7 HCAPLUS  
CN Butanoic acid, 1-[(acetyloxy)methyl]-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, telomer with 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0  
CMF C10 H16 O5 S

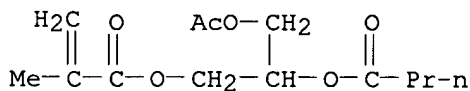


CM 2

CRN 163545-34-4  
CMF (C13 H20 O6) x  
CCI PMS

CM 3

CRN 150941-70-1  
CMF C13 H20 O6

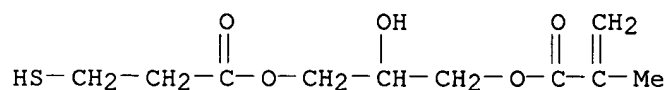


RN 223521-96-8 HCAPLUS  
CN Butanedioic acid, methyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, telomer with 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0

CMF C10 H16 O5 S

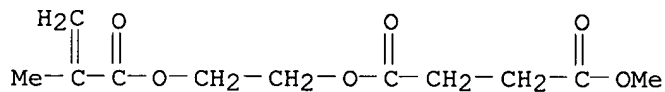


CM 2

CRN 135784-92-8  
CMF (C11 H16 O6) x  
CCI PMS

CM 3

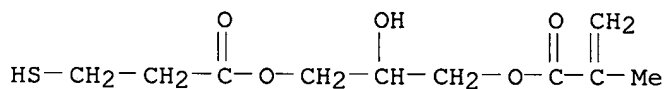
CRN 135739-92-3  
CMF C11 H16 O6



RN 223521-97-9 HCAPLUS  
CN 2-Butenedioic acid, octyl 2-[(1-oxo-2-propenyl)oxy]ethyl ester, telomer  
with 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate  
(9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0  
CMF C10 H16 O5 S

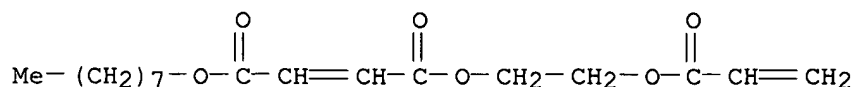


CM 2

CRN 212135-79-0  
CMF (C17 H26 O6) x  
CCI PMS

CM 3

CRN 212135-78-9  
CMF C17 H26 O6



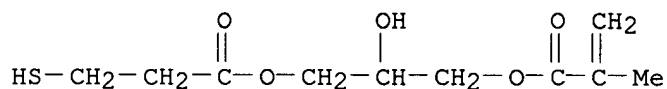
RN 223521-98-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-[[5-(acetyloxy)pentyl]oxy]-3-oxopropyl  
 ester, telomer with 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl  
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0

CMF C10 H16 O5 S



CM 2

CRN 163545-36-6

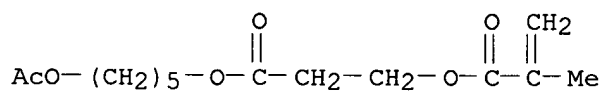
CMF (C14 H22 O6) x

CCI PMS

CM 3

CRN 150941-73-4

CMF C14 H22 O6



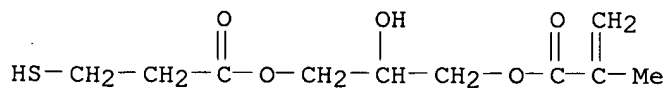
RN 223522-00-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl  
 ester, telomer with 4-[(dodecyloxy)methyl]phenyl 2-propenoate (9CI) (CA  
 INDEX NAME)

CM 1

CRN 125571-36-0

CMF C10 H16 O5 S

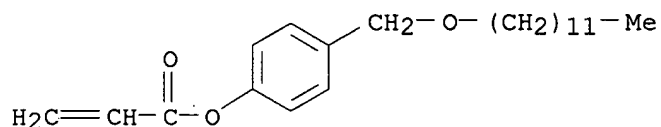


CM 2

CRN 223521-99-1  
CMF (C22 H34 O3) x  
CCI PMS

CM 3

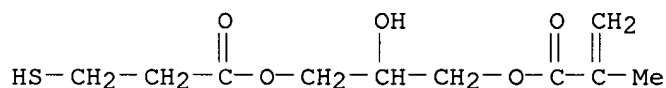
CRN 214674-61-0  
CMF C22 H34 O3



RN 223522-01-8 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, dodecyl ester, telomer with  
2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate and  
octadecyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0  
CMF C10 H16 O5 S

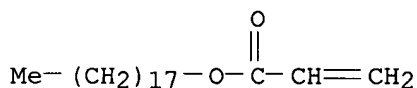


CM 2

CRN 140693-68-1  
CMF (C21 H40 O2 . C16 H30 O2) x  
CCI PMS

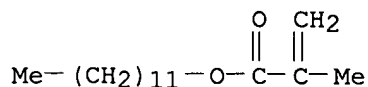
CM 3

CRN 4813-57-4  
CMF C21 H40 O2



CM 4

CRN 142-90-5  
CMF C16 H30 O2



L8 ANSWER 27 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 1999:205409 HCAPLUS  
 DN 130:259567  
 TI Oil-based ink-jet printing-type ink and method of making lithographic printing plate using same  
 IN Kato, Eiichi  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 33 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM B41M005-00  
 ICS B41C001-10; B41N001-14; C09D011-02  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11078226	A2	19990323	JP 1997-252191	19970917
PRAI	JP 1997-252191		19970917		

AB The ink has oil-dispersed particle resin prepared by copolymn. of: (1) a mono-functional monomer insol. in non-aqueous solvent after polymerization;  
 (2) a monomer having a side  $\geq 8$  carbon chain soluble in non-aqueous solvent; and  
 (3) a dispersion stabilizing resin soluble in non-aqueous solvent. The lithog. printing plate is made by; (1) printing an image on a lithog. printing plate original having an image-receiving layer having zinc oxide and a binder on a water-resistant support; and (2) desensitizing the non-image part of the plate. The ink provides excellent dispersibility, storage stability, and printing durability. The printing plates provides high quality image and excellent printing durability.  
 ST Oil ink jet printing lithog plate latex resin particle  
 IT Ink-jet printing  
 Lithographic plates  
 (oil-based ink-jet printing-type ink for lithog. printing plate)  
 IT Inks  
 (oil-based; oil-based ink-jet printing-type ink for lithog. printing plate)  
 IT 39332-53-1, Methyl methacrylate-acrylic acid-methacrylic acid copolymer 60472-57-3D, Methyl methacrylate-methacrylic acid-methyl acrylate-styrene copolymer, reaction products with 4-cyano pentanoic acid 184970-55-6, Methyl methacrylate-acrylic acid-lauryl acrylate-N-vinyl-2-pyrrolidone copolymer 188951-11-3, Methyl methacrylate-styrene-methyl acrylate-2-mercaptobenzoic acid copolymer 221653-56-1, Methyl methacrylate-acrylic acid-methyl acrylate-N-propylacrylamide copolymer  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (binder for lithog. printing plate)  
 IT 104922-28-3P, Mono(2-methacryloyloxy)ethyl glutarate-octadecyl methacrylate copolymer ester with allyl alcohol 220728-45-0P  
 220728-51-8P 221654-03-1P, Dodecyl methacrylate-glycidyl methacrylate-octadecyl methacrylate copolymer ester with 3-acryloyloxy propionic acid

RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation);  
 RACT (Reactant or reagent)  
 (dispersion stabilizing resin for oil based-based ink-jet printing-type  
 ink for lithog. printing plate)

IT 1314-13-2, Zinc oxide, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (lithog. printing plate)

IT 221653-63-0P 221653-64-1P 221653-66-3P 221653-67-4P  
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (oil-based ink-jet printing-type ink for lithog. printing plate)

IT 9003-20-7P, Vinyl acetate homopolymer 55778-35-3P, Octadecyl  
 methacrylate-vinyl acetate copolymer 161641-25-4P, Methyl  
 acrylate-methyl methacrylate-octadecyl acrylate copolymer  
**221653-31-2P**, Vinyl acetate-vinyl oleate graft copolymer  
 221653-32-3P, Vinyl acetate-octadecyl vinyl ether graft copolymer  
 221653-33-4P, Vinyl acetate-Hexyl (methacryloylethyl)succinate graft  
 copolymer 221653-34-5P 221653-35-6P 221653-36-7P 221653-38-9P  
 221653-39-0P 221653-40-3P 221653-41-4P 221653-42-5P 221653-44-7P  
 221653-46-9P 221653-47-0P 221653-50-5P **221653-52-7P**  
 221653-54-9P 221653-58-3P 221653-59-4P 221653-61-8P  
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (particle resin for oil based-based **ink-jet**  
 printing-type ink for lithog. printing plate)

IT **221653-31-2P**, Vinyl acetate-vinyl oleate graft copolymer  
**221653-52-7P**  
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (particle resin for oil based-based **ink-jet**  
 printing-type ink for lithog. printing plate)

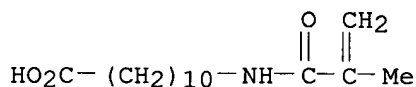
RN 221653-31-2 HCAPLUS

CN 9-Octadecenoic acid (9Z)-, ethenyl ester, polymer with ethenyl acetate,  
 11-[(2-methyl-1-oxo-2-propenyl)amino]undecanoic acid and tridecyl  
 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 59178-93-7

CMF C15 H27 N O3

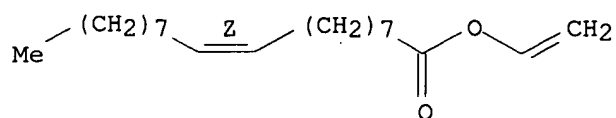


CM 2

CRN 3896-58-0

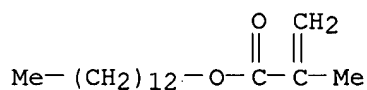
CMF C20 H36 O2

Double bond geometry as shown.



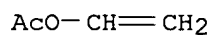
CM 3

CRN 2495-25-2  
CMF C17 H32 O2



CM 4

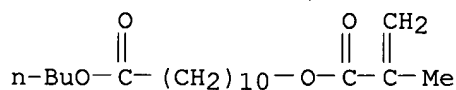
CRN 108-05-4  
CMF C4 H6 O2



RN 221653-52-7 HCAPLUS  
CN Butanedioic acid, mono[2-[(1-oxo-2-propenyl)oxy]ethyl] ester, polymer with butyl 11-[(2-methyl-1-oxo-2-propenyl)oxy]undecanoate, ethenyl acetate, ethenylbenzene, ethenyl propanoate and hexadecyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

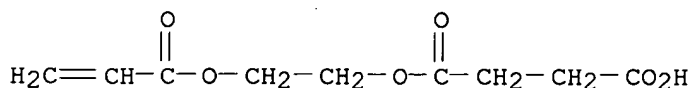
CM 1

CRN 212122-29-7  
CMF C19 H34 O4



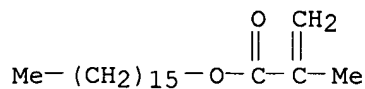
CM 2

CRN 50940-49-3  
CMF C9 H12 O6



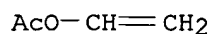
CM 3

CRN 2495-27-4  
CMF C20 H38 O2



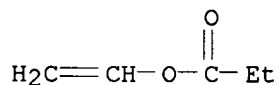
CM 4

CRN 108-05-4  
CMF C4 H6 O2



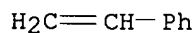
CM 5

CRN 105-38-4  
CMF C5 H8 O2



CM 6

CRN 100-42-5  
CMF C8 H8



L8 ANSWER 28 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
AN 1999:119917 HCAPLUS  
DN 130:202940  
TI Oil-based ink for making lithographic printing plate according to ink-jet  
printing process  
IN Kato, Eiichi  
PA Fuji Photo Film Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 30 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM C09D011-00  
ICS B41C001-10; B41M001-06; B41M005-00; B41N001-14

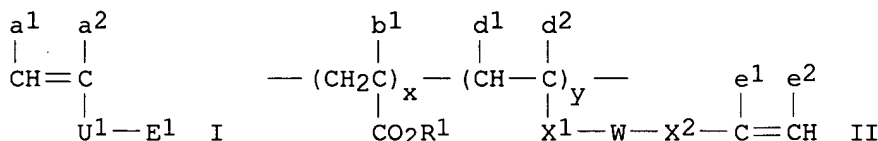
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38, 42

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11043638	A2	19990216	JP 1998-147732	19980528
	US 6174936	B1	20010116	US 1998-85100	19980528
PRAI	JP 1997-154509	A	19970528		

GI



AB The oil-based ink consists of resin particles dispersed in a non-aqueous carrier having elec. resistance  $\geq 109 \, \Omega\text{cm}$  and  $\leq 3.5$  dielec. constant, wherein the resin particles are prepared by polymerization of a

monofunctionalized monomer(A) which becomes non-soluble in a mixed-non-aqueous solvent after polymerization, a monomer I ( $a1-2 = \text{H}$ , halo, cyano, alkyl, etc.;

U1

$= -\text{COO}-$ ,  $-\text{CONH}-$ , etc.;  $\text{E1} = \text{C} \geq 8$  aliphatic) which copolymerizes with the monomer(A), and copolymer II ( $b1 = \text{H}$ ,  $\text{C1-4}$  alkyl;  $\text{R1} = \text{C10-32}$  alkyl, alkenyl;  $d1-2$  and  $e1-2 = \text{H}$ , halo, cyano, alkyl, etc.;  $\text{X1-2} = -\text{COO}-$ ,  $-\text{CONH}-$ , etc.;  $x/y = 90/10-99/1$ ) which is soluble in the mixed non-aqueous solvent. The ink shows excellent characteristics in the redispersion, the shelf-life, and the printing durability.

ST Oil based ink lithog printing plate; resin particle polymn ink jet printing

IT Polymers, preparation

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(graft; oil-based ink for making lithog. printing plate according to ink-jet printing process)

IT Inks

(jet-printing; oil-based ink for making lithog. printing plate according to ink-jet printing process)

IT Ink-jet printing

Lithographic plates

(oil-based ink for making lithog. printing plate according to ink-jet printing process)

IT 220728-45-0P, 11-Methacrylamide undecanoic acid-tridecyl methacrylate

copolymer ester with vinyl alcohol 220728-51-8P 220733-91-5P, 2-Hydroxyethyl methacrylate-octadecyl methacrylate copolymer allylglutaric acid ester 220733-92-6P, Dodecyl methacrylate-octadecyl

methacrylate-glycidyl methacrylate copolymer vinylsuccinate ester

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(dispersion stabilizing resin for preparation of oil-based ink for making lithog. printing plate according to ink-jet printing process)

IT 29406-88-0P, Octadecyl vinyl ether-vinyl acetate copolymer 39049-73-5P,

Ethyl acrylate-methyl methacrylate-octadecyl acrylate copolymer 55778-35-3P, Octadecyl methacrylate-vinyl acetate copolymer 113989-22-3P **178630-10-9P**, Vinyl acetate-vinyl oleate copolymer 212839-66-2P, Methyl methacrylate-methyl acrylate-octadecyl  $\alpha$ -chloroacrylate copolymer 212839-68-4P, Methyl methacrylate-methyl acrylate-tetradecyl  $\alpha$ -cyanoacrylate copolymer 212839-71-9P, Ethyl methacrylate-methyl acrylate-dodecyl acrylate-mono(hexyl)mono(methacryloyloxyethyl) butenedioate copolymer **212839-73-1P**, Vinyl acetate-styrene-vinyl propionate-butoxycarbonyldecyl methacrylate copolymer 212839-74-2P, Methyl methacrylate-acrylic acid-methyl acrylate-docosanyl acrylate copolymer 216878-38-5P, Hexyloxycarbonylethylcarbonyloxyethyl methacrylate-vinyl acetate copolymer 216878-50-1P 220728-60-9P 220728-65-4P 220728-67-6P 220728-70-1P 220728-72-3P 220728-75-6P 220728-78-9P, Methyl methacrylate-2-cyanoethyl methacrylate-methyl acrylate-mono(nonyl) mono( $\alpha$ -chloroacryloyloxyethyl) glutarate copolymer

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(resin particles for oil-based ink for making lithog. printing plate according to **ink-jet** printing process)

IT **220733-92-6P**, Dodecyl methacrylate-octadecyl methacrylate-glycidyl methacrylate copolymer vinylsuccinate ester

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(dispersion stabilizing resin for preparation of oil-based ink for making lithog. printing plate according to **ink-jet** printing process)

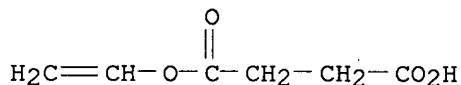
RN 220733-92-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with octadecyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate, ethenyl butanedioate (9CI) (CA INDEX NAME)

CM 1

CRN 44912-22-3

CMF C6 H8 O4



CM 2

CRN 120066-95-7

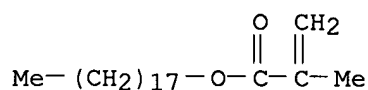
CMF (C22 H42 O2 . C16 H30 O2 . C7 H10 O3)x

CCI PMS

CM 3

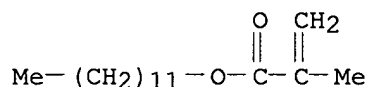
CRN 32360-05-7

CMF C22 H42 O2



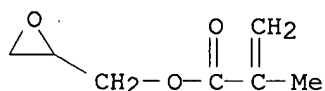
CM 4

CRN 142-90-5  
CMF C16 H30 O2



CM 5

CRN 106-91-2  
CMF C7 H10 O3

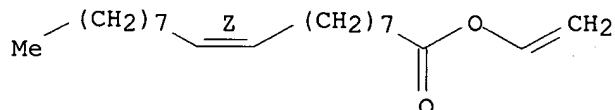


IT 178630-10-9P, Vinyl acetate-vinyl oleate copolymer  
212839-73-1P, Vinyl acetate-styrene-vinyl propionate-  
butoxycarbonyldecyl methacrylate copolymer  
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)  
(resin particles for oil-based ink for making lithog. printing plate  
according to **ink-jet** printing process)  
RN 178630-10-9 HCAPLUS  
CN 9-Octadecenoic acid (9Z)-, ethenyl ester, polymer with ethenyl acetate  
(9CI) (CA INDEX NAME)

CM 1

CRN 3896-58-0  
CMF C20 H36 O2

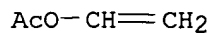
Double bond geometry as shown.



CM 2

CRN 108-05-4

CMF C4 H6 O2



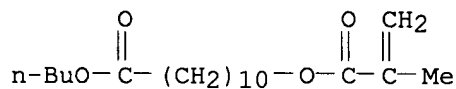
RN 212839-73-1 HCAPLUS

CN Undecanoic acid, 11-[(2-methyl-1-oxo-2-propenyl)oxy]-, butyl ester, polymer with ethenyl acetate, ethenylbenzene and ethenyl propanoate (9CI) (CA INDEX NAME)

CM 1

CRN 212122-29-7

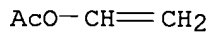
CMF C19 H34 O4



CM 2

CRN 108-05-4

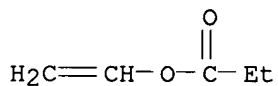
CMF C4 H6 O2



CM 3

CRN 105-38-4

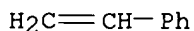
CMF C5 H8 O2



CM 4

CRN 100-42-5

CMF C8 H8



L8 ANSWER 29 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1998:779494 HCAPLUS

DN 130:88184

TI Oil-based ink for ink-jet printing-type lithographic printing master plate  
 IN Kato, Eiichi; Ohsawa, Sadao; Ishii, Kazuo  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 32 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D011-10  
 ICS B41C001-10; B41M005-00; B41N001-14  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other  
 Reprographic Processes)  
 Section cross-reference(s): 35, 38, 42

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10316920	A2	19981202	JP 1997-351563	19971219
	US 6197847	B1	20010306	US 1998-9131	19980120
PRAI	JP 1997-21014	A	19970120		
	JP 1997-83356	A	19970317		
	JP 1997-69143	A	19970306		
	JP 1997-168147	A	19970610		
	JP 1997-351563	A	19971219		

AB The title oil-based ink comprises resin particles dispersed in a nonaq.  
 medium, wherein the resin particles are obtained by polymerizing a  
 monofunctional monomer (A) soluble in a nonaq. solvent but becoming insol.  
 upon polymerization with a partially crosslinked dispersion stabilizing resin

(P) having a polymerizable double bond at one end of the backbone chain.  
 Using an ink-jet printing, an image is formed on an image-receiving layer  
 of the lithog. printing master plate containing Zn oxide and a binder resin  
 from the oil-based ink, followed by desensitizing nonimage areas. This  
 oil-based ink provided excellent redispersibility and storage stability.

ST ink lithog printing master plate

IT Ink-jet printing

Inks

Lithographic plates

(oil-based ink for ink-jet printing-type lithog. printing master plate)

IT 148640-01-1P, Divinylbenzene-octadecyl methacrylate-thioglycolic acid  
 telomer, ester with 2-hydroxyethyl methacrylate 159446-39-6P  
 159446-42-1P 159446-44-3P, Divinylbenzene-2-mercaptoethanol-octadecyl  
 methacrylate telomer vinyl acetic acid ester 159446-45-4P,  
 Divinylbenzene-2-mercaptoethanol-octadecyl methacrylate telomer, ester  
 with methacrylic acid 159446-48-7P, Divinylbenzene-2-mercaptoethanol-  
 octadecyl methacrylate telomer, ester with acrylic acid 214772-24-4P  
 214772-26-6P 214772-29-9P 214772-31-3P 218459-53-1P, Allyl  
 methacrylate-dodecyl methacrylate-thioglycolic acid telomer, ester with  
 2-hydroxyethyl methacrylate 218459-54-2P, Allyl methacrylate-tridecyl  
 methacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl  
 methacrylate 218459-57-5P, Tridecyl methacrylate-trivinylbenzene-  
 thioglycolic acid telomer, ester with 2-hydroxyethyl methacrylate  
 218459-59-7P, Ethylene glycol dimethacrylate-octadecyl  
 methacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl  
 methacrylate 218459-61-1P, Hexadecyl methacrylate-propylene glycol  
 dimethacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl  
 methacrylate 218459-65-5P, Butyl methacrylate-divinyl  
 adipate-dodecylmethacrylate-thioglycolic acid telomer, ester with  
 2-hydroxyethyl methacrylate 218459-67-7P, Ethylene glycol  
 diacrylate-methyl methacrylate-octadecyl methacrylate-thioglycolic acid

telomer, ester with 2-hydroxyethyl methacrylate 218459-70-2P,  
 2-Chloroethyl methacrylate-tridecyl methacrylate-trimethylolpropane  
 trimethacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl  
 methacrylate 218459-72-4P, Divinylbenzene-styrene-tetradecyl  
 methacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl  
 methacrylate 218459-73-5P 218459-74-6P 218459-75-7P 218459-76-8P  
 218459-78-0P, Ethylene glycol diacrylate-octadecyl acrylate copolymer  
 acrylate ester

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(oil-based ink for **ink-jet** printing-type lithog.  
 printing master plate)

IT 136998-25-9P, Divinylbenzene-octadecyl methacrylate-vinyl acetate graft  
 copolymer 214708-68-6P **214708-70-0P** 214772-35-7P,  
 Divinylbenzenemethyl acrylate-methyl methacrylate-octadecyl methacrylate  
 graft copolymer 217955-16-3P 218450-96-5P 218450-98-7P  
**218451-04-8P** 218451-08-2P **218451-10-6P** 218451-12-8P  
 218451-17-3P 218451-21-9P 218451-24-2P 218451-27-5P 218451-30-0P  
 218451-33-3P 218451-36-6P 218451-39-9P **218451-42-4P**  
 218451-47-9P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)

(oil-based ink for **ink-jet** printing-type lithog.  
 printing master plate)

IT **218459-65-5P**, Butyl methacrylate-divinyl adipate-  
 dodecylmethacrylate-thioglycolic acid telomer, ester with 2-hydroxyethyl  
 methacrylate

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(oil-based ink for **ink-jet** printing-type lithog.  
 printing master plate)

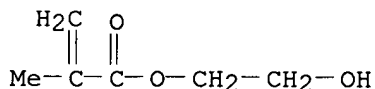
RN 218459-65-5 HCAPLUS

CN Hexanedioic acid, diethenyl ester, telomer with butyl 2-methyl-2-  
 propenoate, dodecyl 2-methyl-2-propenoate and mercaptoacetic acid,  
 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9

CMF C6 H10 O3



CM 2

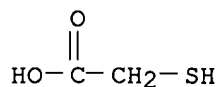
CRN 218459-64-4

CMF (C16 H30 O2 . C10 H14 O4 . C8 H14 O2)x . C2 H4 O2 S

CM 3

CRN 68-11-1

CMF C2 H4 O2 S



CM 4

CRN 218459-63-3

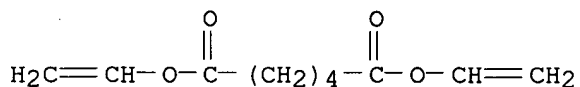
CMF (C16 H30 O2 . C10 H14 O4 . C8 H14 O2)x

CCI PMS

CM 5

CRN 4074-90-2

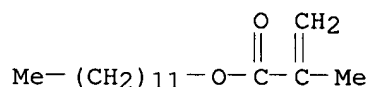
CMF C10 H14 O4



CM 6

CRN 142-90-5

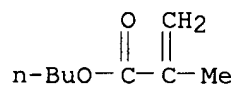
CMF C16 H30 O2



CM 7

CRN 97-88-1

CMF C8 H14 O2



IT 214708-70-0P 218451-04-8P 218451-10-6P

218451-42-4P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

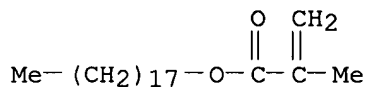
(oil-based ink for **ink-jet** printing-type lithog. printing master plate)

RN 214708-70-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with diethenylbenzene, ethenyl acetate and ethenyl propanoate, graft (9CI) (CA INDEX NAME)

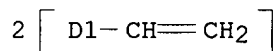
CM 1

CRN 32360-05-7  
CMF C22 H42 O2



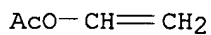
CM 2

CRN 1321-74-0  
CMF C10 H10  
CCI IDS



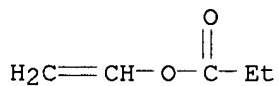
CM 3

CRN 108-05-4  
CMF C4 H6 O2



CM 4

CRN 105-38-4  
CMF C5 H8 O2

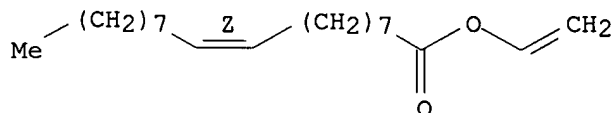


RN 218451-04-8 HCAPLUS  
CN 9-Octadecenoic acid (9Z)-, ethenyl ester, polymer with dodecyl  
2-methyl-2-propenoate and 2-propenyl 2-methyl-2-propenoate, graft (9CI)  
(CA INDEX NAME)

CM 1

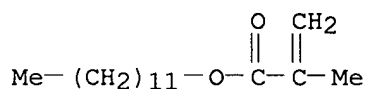
CRN 3896-58-0  
CMF C20 H36 O2

Double bond geometry as shown.



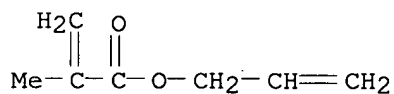
CM 2

CRN 142-90-5  
CMF C16 H30 O2



CM 3

CRN 96-05-9  
CMF C7 H10 O2

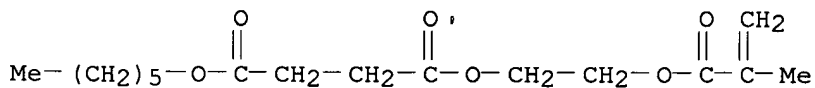


RN 218451-10-6 HCAPLUS

CN Hexanedioic acid, diethenyl ester, polymer with butyl 2-methyl-2-propenoate, dodecyl 2-methyl-2-propenoate and hexyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl butanedioate, graft (9CI) (CA INDEX NAME)

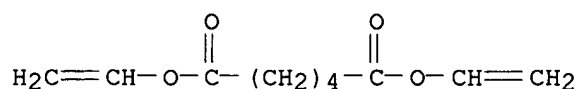
CM 1

CRN 158008-23-2  
CMF C16 H26 O6



CM 2

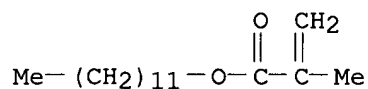
CRN 4074-90-2  
CMF C10 H14 O4



CM 3

CRN 142-90-5

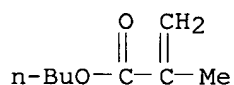
CMF C16 H30 O2



CM 4

CRN 97-88-1

CMF C8 H14 O2



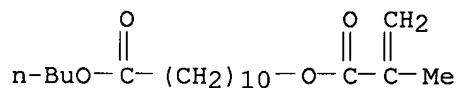
RN 218451-42-4 HCAPLUS

CN Undecanoic acid, 11-[(2-methyl-1-oxo-2-propenyl)oxy]-, butyl ester, polymer with ethenyl acetate, ethenylbenzene and ethenyl propanoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 212122-29-7

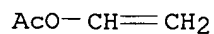
CMF C19 H34 O4



CM 2

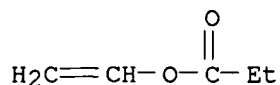
CRN 108-05-4

CMF C4 H6 O2



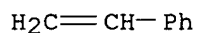
CM 3

CRN 105-38-4  
CMF C5 H8 O2



CM 4

CRN 100-42-5  
CMF C8 H8



L8 ANSWER 30 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
AN 1998:779492 HCAPLUS  
DN 130:73877  
TI Oil-based ink for manufacture of ink-jet printing-type lithographic printing plate  
IN Kato, Eiichi; Ohsawa, Sadao; Ishii, Kazuo  
PA Fuji Photo Film Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 30 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM C09D011-00  
ICS B41C001-10; B41M005-00; C09D011-10  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
Section cross-reference(s): 35, 38, 42

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10316917	A2	19981202	JP 1997-351562	19971219
	US 6184267	B1	20010206	US 1998-9692	19980120
PRAI	JP 1997-19696	A	19970117		
	JP 1997-84434	A	19970318		
	JP 1997-61770	A	19970228		
	JP 1997-351562	A	19971219		

AB The title oil-based ink comprises resin particles dispersed in a nonaq. medium, in which the resin particles are obtained by copolymerizing (1) a monofunctional monomer (A), which is soluble in a nonaq. medium but becoming soluble upon polymerization, (2) a monomer (B), and (3) a partially-crosslinked dispersion-stabilizing resin (P) soluble in the nonaq. medium. A lithog. printing master plate is formed by forming an image on an image-receiving layer containing Zn oxide and a binder resin on a water-resistant support of a lithog. printing master plate, followed by desensitizing nonimage areas of the image-receiving layer. The ink exhibited excellent redispersibility and storage stability.

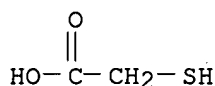
ST lithog printing master plate ink; dispersion stabilizing resin ink jet printing

- IT Ink-jet printing  
Inks  
Lithographic plates  
(oil-based ink for manufacture of ink-jet printing-type lithog. printing plate)
- IT 122324-74-7P, Divinylbenzene-octadecyl methacrylate copolymer  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(dispersion stabilizing resin; oil-based ink for manufacture of ink-jet printing-type lithog. printing plate)
- IT 130805-26-4DP, Divinylbenzene-hexadecyl methacrylate copolymer, carboxy-terminated 130805-48-0DP, Docosanyl methacrylate-ISP22GA copolymer, carboxy-terminated 139703-31-4P, Divinylbenzene-octadecyl methacrylate-thioglycolic acid telomer 139703-33-6P 139720-59-5P 139720-60-8P 139720-61-9P 139720-62-0P 139720-64-2DP, Divinylbenzene-octadecyl methacrylate telomer with 2-mercaptoethylamine, carboxy-terminated 141181-86-4P 148532-76-7P **148532-82-5P** 159291-22-2P 159291-24-4P 213548-20-0P 215672-71-2P 217955-07-2P, Ethylene glycol diacrylate-tetradecyl methacrylate-thioglycolic acid telomer 217955-12-9P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(oil-based ink for manufacture of ink-jet printing-type lithog. printing plate)
- IT 29406-88-0P 36497-24-2P, Hexadecylmethacrylate-vinylbenzene copolymer 55348-35-1P, Divinylbenzene-dodecyl methacrylate-styrene copolymer 55778-35-3P, Octadecyl methacrylate-vinyl acetate copolymer 61255-17-2P, Divinylbenzene-dodecylmethacrylate copolymer 85533-57-9P, Hexadecyl methacrylate-vinyl acetate copolymer 113989-22-3P **120534-27-2P**, Divinyl adipate-dodecyl methacrylate-vinyl acetate copolymer 130805-21-9P, Divinylbenzene-tridecyl methacrylate copolymer 148532-67-6P, Dodecyl methacrylate-octyl methacrylate-trivinylbenzene copolymer 148532-68-7P, Butyl methacrylate-ethylene glycol dimethacrylate-octadecyl methacrylate copolymer 148532-69-8P, N,N-Dimethylaminoethyl methacrylate-dodecyl methacrylate-ethylene glycol diacrylate copolymer **148532-70-1P**, Octadecyl methacrylate-2-(trimethoxysilyloxy)ethyl methacrylate-vinyl methacrylate copolymer 148532-71-2P, Allyl methacrylate-tetradecyl methacrylate copolymer 148532-72-3P, Diethylene glycol dimethacrylate-methacrylic acid-octadecyl methacrylate copolymer 159133-93-4P, 2-Hydroxyethyl methacrylate-octadecyl methacrylate-triethylene glycol dimethacrylate copolymer **178630-10-9P**, Vinyl acetate-vinyl oleate copolymer 213076-91-6P, Dodecyl methacrylate-trimethylolpropane methacrylate-N-vinylpyrrolidone copolymer 214708-94-8P 214708-95-9P 214747-85-0P 216878-38-5P 217955-16-3P 217955-20-9P 217955-24-3P 217955-29-8P 217955-34-5P 217955-39-0P, Divinylbenzene-methyl acrylate-methyl methacrylate-octadecyl acrylate-octadecyl methacrylate graft copolymer 217955-44-7P 217955-49-2P 217955-53-8P 217955-59-4P **217955-64-1P** 217955-68-5P  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(oil-based ink for manufacture of ink-jet printing-type lithog. printing plate)
- IT **148532-82-5P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(oil-based ink for manufacture of ink-jet printing-type lithog. printing plate)

RN 148532-82-5 HCAPLUS  
 CN Hexanedioic acid, diethenyl ester, telomer with hexadecyl  
 2-methyl-2-propenoate and mercaptoacetic acid (9CI) (CA INDEX NAME)

CM 1

CRN 68-11-1  
 CMF C2 H4 O2 S

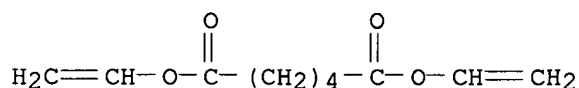


CM 2

CRN 148532-81-4  
 CMF (C20 H38 O2 . C10 H14 O4)x  
 CCI PMS

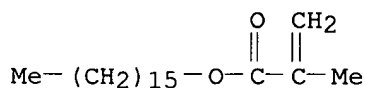
CM 3

CRN 4074-90-2  
 CMF C10 H14 O4



CM 4

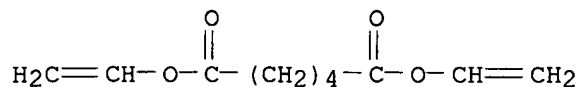
CRN 2495-27-4  
 CMF C20 H38 O2



IT **120534-27-2P**, Divinyl adipate-dodecyl methacrylate-vinyl acetate copolymer **148532-70-1P**, Octadecyl methacrylate-2-(trimethoxysilyloxy)ethyl methacrylate-vinyl methacrylate copolymer **178630-10-9P**, Vinyl acetate-vinyl oleate copolymer **217955-64-1P**  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (oil-based ink for manufacture of **ink-jet** printing-type lithog. printing plate)  
 RN 120534-27-2 HCAPLUS  
 CN Hexanedioic acid, diethenyl ester, polymer with dodecyl  
 2-methyl-2-propenoate and ethenyl acetate (9CI) (CA INDEX NAME)

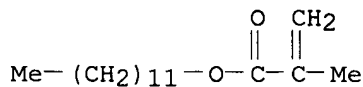
CM 1

CRN 4074-90-2  
CMF C10 H14 O4



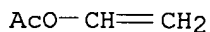
CM 2

CRN 142-90-5  
CMF C16 H30 O2



CM 3

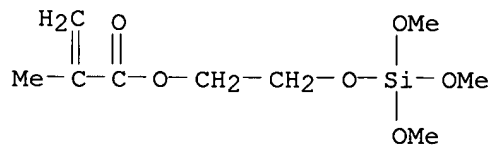
CRN 108-05-4  
CMF C4 H6 O2



RN 148532-70-1 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, ethenyl ester, polymer with octadecyl  
2-methyl-2-propenoate and 2-[(trimethoxysilyl)oxy]ethyl  
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

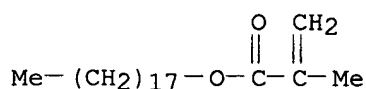
CM 1

CRN 120358-73-8  
CMF C9 H18 O6 Si



CM 2

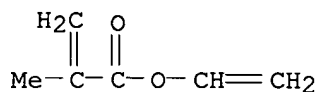
CRN 32360-05-7  
CMF C22 H42 O2



CM 3

CRN 4245-37-8

CMF C6 H8 O2



RN 178630-10-9 HCAPLUS

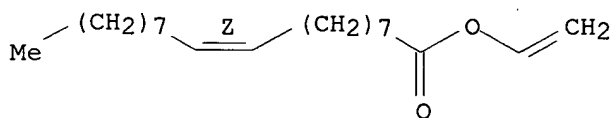
CN 9-Octadecenoic acid (9Z)-, ethenyl ester, polymer with ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 3896-58-0

CMF C20 H36 O2

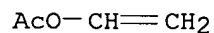
Double bond geometry as shown.



CM 2

CRN 108-05-4

CMF C4 H6 O2



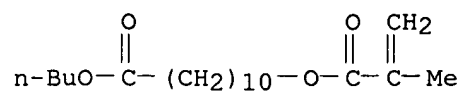
RN 217955-64-1 HCAPLUS

CN Undecanoic acid, 11-[(2-methyl-1-oxo-2-propenyl)oxy]-, butyl ester, polymer with diethenylbenzene, dodecyl 2-methyl-2-propenoate, ethenyl acetate, ethenylbenzene and ethenyl propanoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 212122-29-7

CMF C19 H34 O4

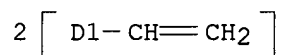


CM 2

CRN 1321-74-0

CMF C10 H10 +

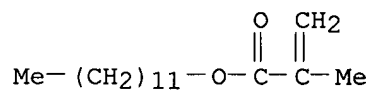
CCI IDS



CM 3

CRN 142-90-5

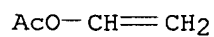
CMF C16 H30 O2



CM 4

CRN 108-05-4

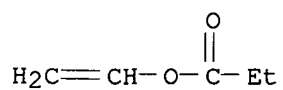
CMF C4 H6 O2



CM 5

CRN 105-38-4

CMF C5 H8 O2



CM 6

CRN 100-42-5

CMF C8 H8

 $\text{H}_2\text{C}=\text{CH}-\text{Ph}$ 

L8 ANSWER 31 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1998:767927 HCAPLUS

DN 130:88194

TI Oil-based ink for making lithographic printing plate by ink-jet printing and manufacture of lithographic plate

IN Kato, Eiichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 40 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM B41M005-00

ICS B41M005-00; B41C001-10; B41J002-01; C09D011-00

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38, 42

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10315617	A2	19981202	JP 1997-148623	19970522
PRAI	JP 1997-148623		19970522		

AB The oil-based ink is used for ink-jet printing on a water-resistant support with hydrophilic surface for lithog., in which at least the following resin particles are dispersed in a nonaq. solvent (elec. resistance  $\geq 109 \Omega\text{cm}$ , dielec. constant  $\leq 3.5$ ). The resin particles are manufactured by polymerization of  $\geq 1$  monofunctional monomer, dissolved in a solution in the nonaq. solvent and giving insol. polymers, and  $\geq 1$  monofunctional macromonomer with weight average mol. weight  $\leq 2 + 104$  in the presence of dispersion-stabilizing block polymer. The macromonomer has  $\text{blCH:Cb2V1}$  at one end of a main chain of a polymer with repeating unit  $(\text{alCHCa2X0D0})$  [ $\text{X0} = \text{COO}, \text{OCO}, (\text{CH}_2)\text{rCOO}, (\text{CH}_2)\text{rOCO}, \text{O}, \text{SO}_2, \text{CONHCOO}, \text{CONHCONH}, \text{COND11}, \text{SO2ND11}, \text{phenylene}; \text{D11} = \text{H}, \text{C1-22 hydrocarbon residue}; \text{r} = 1-4; \text{a1}, \text{a2} = \text{H}, \text{halo}, \text{cyano}, \text{hydrocarbon residue}, \text{COORD12}; \text{D12} = \text{H}, (\text{substituted}) \text{hydrocarbon residue}; \text{D0} = \text{C} \geq 8 \text{ aliphatic group}, (\text{L1K1})\text{m}(\text{L2K2})\text{nR21}; \text{R21} = \text{H}, \text{C1-18 aliphatic group}; \text{K1}, \text{K2} = \text{O}, \text{S}, \text{CO}, \text{CO}_2, \text{OCO}, \text{SO}_2, \text{NR22}, \text{CONR22}, \text{NR22CO}, \text{NR22SO}_2, \text{SO2NR22}, \text{NHCO}_2, \text{HNHCONH}; \text{R22} = \text{R21}; \text{L1}, \text{L2} = \text{C1-18 hydrocarbon residue}]. The dispersion-stabilizing resin is a star block copolymer with  $2 + 104-1 + 106$  weight average mol. weight, in which organic mol. is linked with  $\geq 3$  A-B type block polymer chain. A lithog. plate with improved printing resistance is manufactured by electrostatic ink jet printing using the above ink showing good redispersibility and storage stability.$

ST oil based ink lithog printing master plate; star block copolymer resin particle; dispersion stabilizing agent

IT Polymers, uses

RL: MOA (Modifier or additive use); USES (Uses)

(block, star; oil-based ink for making lithog. printing plate by

- ink-jet printing method)
- IT Inks  
(jet-printing; oil-based ink for making lithog. printing plate by ink-jet printing method)
- IT Disperse systems  
Lithographic plates  
(oil-based ink for making lithog. printing plate by ink-jet printing method)
- IT Macromonomers  
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(oil-based ink for making lithog. printing plate by ink-jet printing method)
- IT Inks  
(oil-based; oil-based ink for making lithog. printing plate by ink-jet printing method)
- IT 150469-59-3P, Vinyl acetate-crotonic acid-octadecyl methacrylate block copolymer 156682-80-3P, Methyl acrylate-methylmethacrylate-stearyl methacrylate copolymer 159967-35-8P, Methyl methacrylate-ethyl acrylate-dodecyl methacrylate block copolymer 159967-45-0P, Styrene-p-methylstyrene-octadecyl methacrylate-dodecyl acrylate block copolymer **159967-46-1P**, Vinyl acetate-vinyl propionate-hexadecyl methacrylate block copolymer 159967-47-2P, Methyl methacrylate-methyl acrylate-dodecyl methacrylate-octadecyl acrylate-N-vinyl-2-pyrrolidinone block copolymer 159967-48-3P, Benzyl methacrylate-acrylic acid-eicosyl methacrylate block copolymer 159967-49-4P, Methyl methacrylate-methyl acrylate-methacrylic acid-heineicosyl methacrylate block copolymer 159967-50-7P, Methyl methacrylate-octadecyl methacrylate-mono(methacryloyloxyethyl)phosphate block copolymer **159967-52-9P**, Vinyl acetate-octadecyl methacrylate-vinyl laurate-methoxyethene block copolymer 159967-54-1P, Acrylonitrile-methyl methacrylate-ethyl acrylate-decyl methacrylate-octadecyl acrylate block copolymer 159967-55-2P, N,N-Dimethylacrylamide-ethyl methacrylate-octadecyl methacrylate block copolymer 159967-56-3P, p-Hydroxystyrene-styrene-tetradecyl methacrylate block copolymer 161641-21-0P 218451-02-6P, Methyl methacrylate-octadecyl acrylate-tetradecyl methacrylate-ethyl acrylate-N,N-dimethylaminoethyl methacrylamide block copolymer  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(dispersion stabilizing agent; oil-based ink for making lithog. printing plate by **ink-jet** printing method)
- IT 150551-83-0 150551-92-1 150551-93-2 150551-97-6 154340-06-4  
155293-25-7 158320-09-3 159967-38-1 159967-39-2 159967-40-5  
159967-41-6 159967-42-7 159967-43-8 215871-58-2  
RL: MOA (Modifier or additive use); USES (Uses)  
(initiator; oil-based ink for making lithog. printing plate by ink-jet printing method)
- IT 138005-14-8P 139104-87-3P, Dodecyl methacrylate, telomer with 3-mercaptopropionic acid, ester with glycidyl methacrylate 139104-90-8P  
139105-03-6P 139105-08-1P 139105-12-7P 147130-40-3P 147130-42-5P  
147130-50-5P 214835-07-1P 215877-61-5P 217188-75-5P 218926-35-3P  
218926-38-6P 218926-41-1P 218926-44-4P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(oil-based ink for making lithog. printing plate by ink-jet printing method)
- IT 132176-90-0P, Vinyl acetate-octadecyl methacrylate graft copolymer  
132176-92-2P, Vinyl acetate-lauryl methacrylate graft copolymer

138114-33-7P 138114-44-0P 141288-13-3P, Vinyl acetate-tridecyl methacrylate graft copolymer 147046-12-6P 163180-65-2P, Vinyl acetate-octadecyl acrylate graft copolymer 213548-12-0P, Methyl methacrylate-2-cyanoethyl acrylate-methyl acrylate-lauryl methacrylate-octadecyl acrylate graft copolymer 215510-45-5P, Ethyl acrylate-methyl methacrylate-lauryl methacrylate-octadecyl acrylate graft copolymer 216983-28-7P, Methyl acrylate-ethyl methacrylate-hexadecyl methacrylate graft copolymer 218451-07-1P 218451-16-2P 218451-20-8P, Vinyl acetate-heptadecanoyloxyethyl methacrylate graft copolymer **218451-23-1P**, Crotonic acid-vinyl acetate-vinyl propionate-hexadecyl methacrylate graft copolymer 218451-26-4P, Ethyl methacrylate-methyl acrylate-eicosyl methacrylate graft copolymer 218451-29-7P, Vinyl acetate-styrene-heptadecanoyloxyethyl methacrylate graft copolymer 218451-32-2P, Vinyl acetate-1-vinyl-2-pyrrolidone-2,3-dihexanoyloxypropyl methacrylate graft copolymer 218451-35-5P 218451-38-8P 218451-41-3P 218451-46-8P, Crotonic acid-ethyl acrylate-butyl(3-butenyl)butanedioate graft copolymer 218451-49-1P **218451-51-5P**, Vinyl acetate-styrene-vinyl propionate-tridecyl methacrylate graft copolymer 218451-53-7P, Methyl methacrylate-acrylic acid-ethyl acrylate-eicosyl methacrylate graft copolymer  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(oil-based ink for making lithog. printing plate by **ink-jet** printing method)

IT **159967-46-1P**, Vinyl acetate-vinyl propionate-hexadecyl methacrylate block copolymer **159967-52-9P**, Vinyl acetate-octadecyl methacrylate-vinyl laurate-methoxyethene block copolymer  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (dispersion stabilizing agent; oil-based ink for making lithog. printing plate by **ink-jet** printing method)

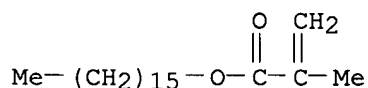
RN 159967-46-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, hexadecyl ester, polymer with ethenyl acetate and ethenyl propanoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 2495-27-4

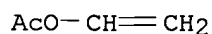
CMF C20 H38 O2



CM 2

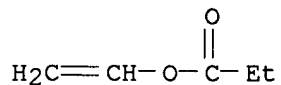
CRN 108-05-4

CMF C4 H6 O2



CM 3

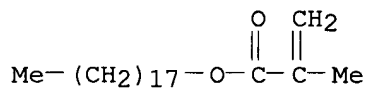
CRN 105-38-4  
CMF C5 H8 O2



RN 159967-52-9 HCAPLUS  
CN Dodecanoic acid, ethenyl ester, polymer with ethenyl acetate, methoxyethene and octadecyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

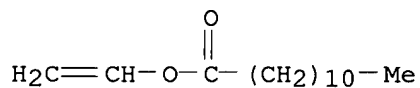
CM 1

CRN 32360-05-7  
CMF C22 H42 O2



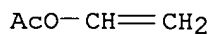
CM 2

CRN 2146-71-6  
CMF C14 H26 O2



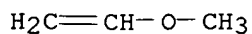
CM 3

CRN 108-05-4  
CMF C4 H6 O2

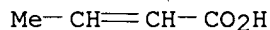


CM 4

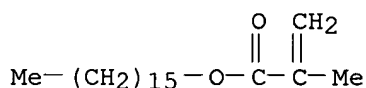
CRN 107-25-5  
CMF C3 H6 O



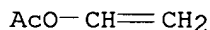
IT **218451-23-1P**, Crotonic acid-vinyl acetate-vinyl propionate-hexadecyl methacrylate graft copolymer **218451-51-5P**, Vinyl acetate-styrene-vinyl propionate-tridecyl methacrylate graft copolymer  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (oil-based ink for making lithog. printing plate by **ink-jet** printing method)  
 RN 218451-23-1 HCAPLUS  
 CN 2-Butenoic acid, polymer with ethenyl acetate, ethenyl propanoate and hexadecyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 3724-65-0  
 CMF C4 H6 O2



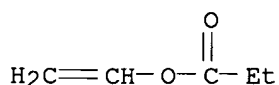
CM 2  
 CRN 2495-27-4  
 CMF C20 H38 O2



CM 3  
 CRN 108-05-4  
 CMF C4 H6 O2



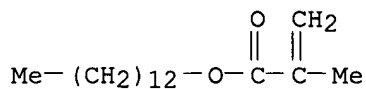
CM 4  
 CRN 105-38-4  
 CMF C5 H8 O2



RN 218451-51-5 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, tridecyl ester, polymer with ethenyl acetate, ethenylbenzene and ethenyl propanoate, graft (9CI) (CA INDEX NAME)

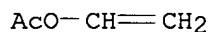
CM 1

CRN 2495-25-2  
CMF C17 H32 O2



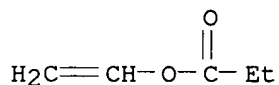
CM 2

CRN 108-05-4  
CMF C4 H6 O2



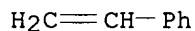
CM 3

CRN 105-38-4  
CMF C5 H8 O2



CM 4

CRN 100-42-5  
CMF C8 H8



L8 ANSWER 32 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
AN 1998:747484 HCAPLUS  
DN 130:59085  
TI Oil-based ink for making ink jet-type lithographic printing plate  
IN Kato, Eiichi  
PA Fuji Photo Film Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 33 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM C09D011-00  
ICS B41C001-10; B41M005-00  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other

## Reprographic Processes)

Section cross-reference(s): 35, 38, 42

FAN.CNT 2

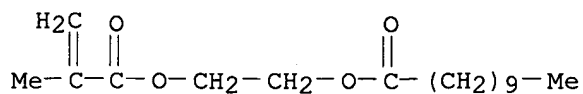
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10306245	A2	19981117	JP 1997-168147	19970610
	US 6197847	B1	20010306	US 1998-9131	19980120
PRAI	JP 1997-69143	A	19970306		
	JP 1997-21014	A	19970120		
	JP 1997-83356	A	19970317		
	JP 1997-168147	A	19970610		
	JP 1997-351563	A	19971219		
AB	The oil-based ink comprises a polymer which is obtained by polymerizing a monofunctional monomer (A), a monofunctional macromer [a1CH-Ca2(V0-D0)] (V0 = COO, OCO, etc.; a1,2 = mH, halo, cyano, etc.; D0 = C8-22 hydrocarbon), and a partially crosslinked polymer [d1CH-Cd2(X1-Y1)] (X1 = COO, OCO, etc.; Y1 = C10-32 aliphatic hydrocarbon; d1,2 = a1,2) in a nonaq. solvent in the presence of a dispersion stabilizing resin. The monomers are sol in the solvent but becoming insol. upon polymerization The ink provided excellent redispersibility and storage stability.				
ST	ink jet lithog printing plate; dispersion stabilizing resin ink				
IT	Ink-jet printing				
	Inks				
	Lithographic plates				
	(oil-based ink for making ink jet-type lithog. printing plate)				
IT	217648-21-0P				
	RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)				
	(oil-based ink for making ink jet-type lithog. printing plate)				
IT	138005-15-9DP, 2,3-Diheptanoyloxypropyl methacrylate homopolymer, carboxy-terminated, ester with glycidyl methacrylate				
	139104-90-8P	139105-03-6P	139105-08-1P	139105-12-7P	147130-31-2P
	147130-32-3P	147130-40-3P	147130-50-5P	215877-54-6P	215877-61-5P
	215877-71-7P	217076-85-2P	217322-94-6P	217322-97-9P	
	RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)				
	(oil-based ink for making ink jet-type lithog. printing plate)				
IT	132176-90-0P	132176-92-2P	134240-04-3DP, methacryloyloxy-terminated		
	138114-29-1P	138114-31-5P	138114-33-7P	139703-39-2P	139703-40-5P
	139720-60-8P	139720-62-0P	139720-63-1P	141288-13-3P	141288-18-8P
	159446-39-6P	159446-42-1P	159446-45-4P	159446-48-7P	163035-17-4P
	202459-35-6P	213547-91-2P	213547-94-5P	213548-26-6P	214708-25-5P
	214708-27-7P	214772-24-4P	214772-26-6P	217314-65-3P	217314-70-0P
	217314-72-2P	217314-73-3P	217314-74-4P	217314-76-6P	217314-77-7P
	217314-79-9P	217314-81-3P	217314-83-5P	217314-84-6P	
	217322-98-0P	217323-01-8P	217323-04-1P	217323-06-3P	
	217323-08-5P	217323-20-1P	217323-22-3P		
	RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)				
	(oil-based ink for making ink jet-type lithog. printing plate)				
IT	217314-79-9P	217314-83-5P	217323-04-1P		
	RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)				
	(oil-based ink for making ink jet-type lithog. printing plate)				
RN	217314-79-9	HCAPLUS			

CN Undecanoic acid, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with ethenyl acetate, ethenylbenzene and ethenyl propanoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 139720-83-5

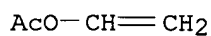
CMF C17 H30 O4



CM 2

CRN 108-05-4

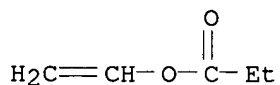
CMF C4 H6 O2



CM 3

CRN 105-38-4

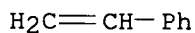
CMF C5 H8 O2



CM 4

CRN 100-42-5

CMF C8 H8



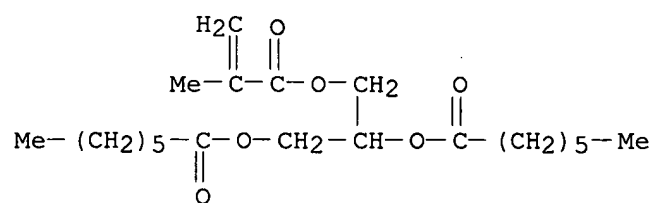
RN 217314-83-5 HCAPLUS

CN Heptanoic acid, 1-[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,2-ethanediyl ester, polymer with 2-butenic acid, ethenyl acetate and ethenyl propanoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 124322-34-5

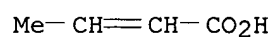
CMF C21 H36 O6



CM 2

CRN 3724-65-0

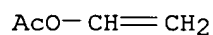
CMF C4 H6 O2



CM 3

CRN 108-05-4

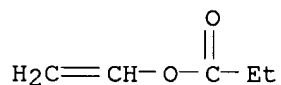
CMF C4 H6 O2



CM 4

CRN 105-38-4

CMF C5 H8 O2



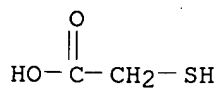
RN 217323-04-1 HCAPLUS

CN Hexanedioic acid, diethenyl ester, telomer with butyl 2-methyl-2-propenoate and mercaptoacetic acid (9CI) (CA INDEX NAME)

CM 1

CRN 68-11-1

CMF C2 H4 O2 S

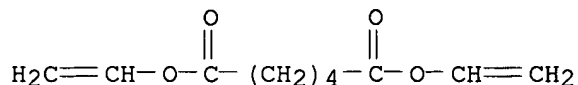


CM 2

CRN 217323-03-0  
 CMF (C10 H14 O4 . C8 H14 O2)x  
 CCI PMS

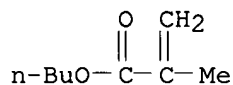
CM 3

CRN 4074-90-2  
 CMF C10 H14 O4



CM 4

CRN 97-88-1  
 CMF C8 H14 O2



L8 ANSWER 33 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 1998:744878 HCAPLUS  
 DN 130:59084  
 TI Oil-based ink for making ink jet-type lithographic printing plate  
 IN Kato, Eiichi  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 37 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D011-00  
 ICS B41C001-10; B41M005-00  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other  
 Reprographic Processes)  
 Section cross-reference(s): 35, 38, 42

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10306244	A2	19981117	JP 1997-168146	19970610
PRAI	JP 1997-63800		19970303		

AB The oil-based ink contains dispersion-stabilizing resin particles in a nonaq. solvent, wherein the resin particles are made from an A-B-type star block copolymer consisting of a monofunctional monomer (A) and a block (B) represented by [a1CH-Ca2(X1-Y1)] (a 1,2 = H, halo, cyano, etc.; X1 = COO, OCO, etc.; Y1 = C≥8 aliphatic). The block (A) and (B) are soluble in the nonaq. solvent but becoming insol. upon polymerization. The ink provided excellent redispersibility, storage stability, and printing fastness.

ST oil ink lithog printing plate making; star block copolymer resin particle  
 IT Ink-jet printing

## Inks

## Lithographic plates

(oil-based ink for making ink jet-type lithog. printing plate)

IT 155313-00-1

RL: MOA (Modifier or additive use); USES (Uses)

(oil-based ink for making ink jet-type lithog. printing plate)

IT 9003-20-7P, Vinyl acetate homopolymer 29406-88-0P, Octadecylvinyl ether-vinyl acetate copolymer 55778-35-3P, Octadecyl methacrylate-vinyl acetate copolymer 85533-57-9P, Hexadecyl methacrylate-Vinyl acetate copolymer 113989-22-3P 128921-17-5P 161641-25-4P, Methyl

**178630-10-9P**, Vinyl acetate-vinyl oleate copolymer 212839-66-2P

212839-68-4P 212839-69-5P 212839-70-8P 212839-72-0P

**212839-73-1P** 213263-27-5P 216878-38-5P 216878-45-4P

216878-50-1P 216878-70-5P 216878-80-7P 216878-83-0P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(oil-based ink for making **ink jet**-type lithog. printing plate)

IT 150551-83-0 150551-89-6 150551-92-1 150551-93-2 150551-97-6

154340-06-4 155161-59-4 159967-38-1 159967-39-2 159967-41-6

159967-42-7 159967-43-8 216877-91-7

RL: MOA (Modifier or additive use); USES (Uses)

(polymerization initiator; oil-based ink for making ink jet-type lithog. printing plate)

IT 150469-59-3P 159967-35-8P, Dodecyl methacrylate-ethyl acrylate-methyl methacrylate block copolymer 159967-36-9P, Methyl acrylate-methyl methacrylate-stearyl methacrylate block copolymer **159967-46-1P**

159967-47-2P 159967-48-3P 159967-49-4P 159967-50-7P 159967-51-8P

159967-53-0P 159967-54-1P 159967-55-2P 159967-56-3P 216878-23-8P

216988-37-3P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(star; oil-based ink for making **ink jet**-type lithog. printing plate)

IT **178630-10-9P**, Vinyl acetate-vinyl oleate copolymer **212839-73-1P**

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(oil-based ink for making **ink jet**-type lithog. printing plate)

RN 178630-10-9 HCAPLUS

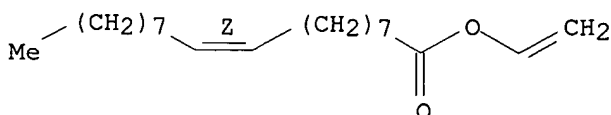
CN 9-Octadecenoic acid (9Z)-, ethenyl ester, polymer with ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 3896-58-0

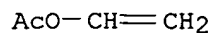
CMF C20 H36 O2

Double bond geometry as shown.



CM 2

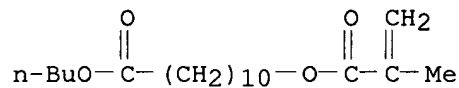
CRN 108-05-4  
CMF C4 H6 O2



RN 212839-73-1 HCAPLUS  
CN Undecanoic acid, 11-[(2-methyl-1-oxo-2-propenyl)oxy]-, butyl ester,  
polymer with ethenyl acetate, ethenylbenzene and ethenyl propanoate (9CI)  
(CA INDEX NAME)

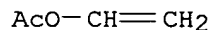
CM 1

CRN 212122-29-7  
CMF C19 H34 O4



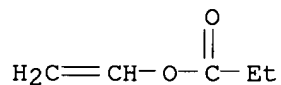
CM 2

CRN 108-05-4  
CMF C4 H6 O2



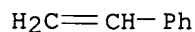
CM 3

CRN 105-38-4  
CMF C5 H8 O2



CM 4

CRN 100-42-5  
CMF C8 H8



IT 159967-46-1P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(star; oil-based ink for making ink jet-type lithog. printing plate)

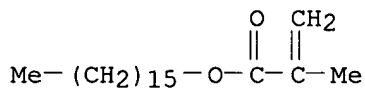
RN 159967-46-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, hexadecyl ester, polymer with ethenyl acetate and ethenyl propanoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 2495-27-4

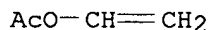
CMF C20 H38 O2



CM 2

CRN 108-05-4

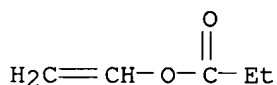
CMF C4 H6 O2



CM 3

CRN 105-38-4

CMF C5 H8 O2



L8 ANSWER 34 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1998:739336 HCAPLUS

DN 130:45311

TI Oil based-based ink-jet printing-type ink for lithographic printing plate

IN Kato, Eiichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 41 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM B41M005-00

ICS B41C001-10; C09D011-00

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38

FAN.CNT 1

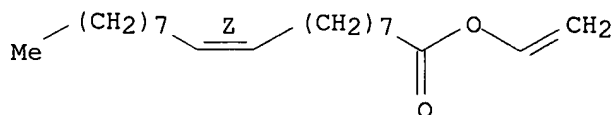
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10297083	A2	19981110	JP 1997-168148	19970610
PRAI	JP 1997-61767		19970228		
AB	The title ink contains polymer particles which are obtained by polymerizing monofunctional monomers in the presence of a A-B-type star block copolymer dispersion stabilizing resin. The block A is a monofunctional monomer which is soluble in a nonaq. solvent but becoming insol. upon polymerization, and the block B is represented by [a1HC-Ca2(X1-Y1)] (X1 = COO, OCO, etc.; a1,2 = H, halo, cyano, etc.; Y1 = C≥8 aliphatic). The ink provided excellent dispersibility, storage stability, and printing durability, and furthermore, exhibited stable ink ejection property.				
ST	ink jet printing lithog plate; star block copolymer polymn stabilizing agent				
IT	Polymerization catalysts (for star block polymerization; oil based-based ink for ink-jet printing-type lithog. printing plate)				
IT	Ink-jet printing Inks Lithographic plates (oil based-based ink for ink-jet printing-type lithog. printing plate)				
IT	150469-59-3P	159967-35-8P	159967-47-2P	159967-48-3P	159967-49-4P
	159967-50-7P	159967-51-8P	159967-53-0P	159967-54-1P	159967-55-2P
	159967-56-3P	216878-11-4P	216878-23-8P	216988-37-3P	
	RL: MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses) (dispersion stabilizing resin; oil based-based ink for ink-jet printing-type lithog. printing plate)				
IT	150551-83-0	150551-89-6	150551-92-1	150551-93-2	150551-97-6
	155161-59-4	155293-25-7	158034-40-3	159967-38-1	159967-39-2
	159967-41-6	159967-42-7	159967-43-8	216877-91-7	
	RL: MOA (Modifier or additive use); USES (Uses) (initiator for star copolymn.; oil based-based ink for ink-jet printing-type lithog. printing plate)				
IT	9003-20-7P, Vinyl acetate homopolymer 9003-96-7P, Polyoctadecylvinyl ether <b>25038-00-0P</b> , Polyvinyl oleate 25986-80-5P, Polyhexadecyl methacrylate 138005-14-8P 161641-25-4P, Methyl acrylate-methyl methacrylate-octadecyl acrylate copolymer 212839-66-2P 212839-68-4P 212839-69-5P 212839-70-8P 212839-72-0P <b>212839-73-1P</b> 213263-27-5P 216878-49-8P 216878-56-7P 216878-60-3P 216878-70-5P 216878-80-7P 216878-83-0P				
	RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (oil based-based ink for ink-jet printing-type lithog. printing plate)				
IT	159967-36-9P, Methyl acrylate-methyl methacrylate-stearyl methacrylate block copolymer				
	RL: MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses) (star; oil based-based ink for ink-jet printing-type lithog. printing plate)				
IT	<b>25038-00-0P</b> , Polyvinyl oleate <b>212839-73-1P</b>				
	RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (oil based-based ink for ink-jet printing-type				

lithog. printing plate)  
 RN 25038-00-0 HCAPLUS  
 CN 9-Octadecenoic acid (9Z)-, ethenyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 3896-58-0  
 CMF C20 H36 O2

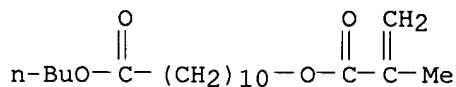
Double bond geometry as shown.



RN 212839-73-1 HCAPLUS  
 CN Undecanoic acid, 11-[(2-methyl-1-oxo-2-propenyl)oxy]-, butyl ester, polymer with ethenyl acetate, ethenylbenzene and ethenyl propanoate (9CI) (CA INDEX NAME)

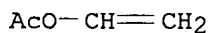
CM 1

CRN 212122-29-7  
 CMF C19 H34 O4



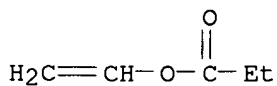
CM 2

CRN 108-05-4  
 CMF C4 H6 O2



CM 3

CRN 105-38-4  
 CMF C5 H8 O2



CM 4

CRN 100-42-5  
CMF C8 H8

H<sub>2</sub>C=CH-Ph

L8 ANSWER 35 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
AN 1998:735164 HCAPLUS  
DN 130:59082  
TI Oil-based ink for ink-jet making of printing plate  
IN Kato, Eiichi  
PA Fuji Photo Film Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 30 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM C09D011-02  
ICS B41J002-01; B41M005-00  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other  
Reprographic Processes)  
Section cross-reference(s): 42

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10298479	A2	19981110	JP 1997-252178	19970917
PRAI	JP 1997-61768		19970228		

AB The title ink contains a resin particle, which is made of (a) a monofunctional monomer, (b) a monofunctional micro-monomer of mw  $\leq 2 \times 10^4$  having a terminal double bond, and (c) a dispersion-stabilizing resin dispersed in a non-aqueous solution The use of the

ink for manufacturing a printing plate is also claimed. The ink can be used in ink-jet plate-making and shows superior re-dispersing property, storage stability and printing ability.

ST oil based printing plate making ink; graft copolymer particle oil based ink

IT Ink-jet printing  
Inks

(oil-based ink for ink-jet making of printing plate containing specified copolymer)

IT 139104-87-3P 139104-90-8P 139105-03-6P 139105-08-1P 139105-12-7P  
147130-31-2P 147130-40-3P 147130-42-5P 147130-44-7P 147130-50-5P  
214835-07-1P 215877-61-5P 215877-71-7P 217089-79-7DP, carboxy  
terminated, reaction product with glycidyl methacrylate 217188-65-3P  
217188-75-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepared as micro-monomer for oil-based ink for ink-jet making of printing plate)

IT 134436-95-6P, Dodecyl methacrylate-octadecyl methacrylate-vinyl acetate graft copolymer 214625-56-6P, Acrylic acid-dodecyl methacrylate-methyl acrylate-methyl methacrylate-octadecyl acrylate copolymer  
**217089-80-0P** 217089-81-1P 217089-83-3P **217089-85-5P**  
217089-87-7P, Acrylic acid-dodecyl methacrylate-ethyl acrylate-methyl methacrylate graft copolymer 217089-88-8P, Acrylic acid-dodecyl

methacrylate-methyl acrylate-methyl methacrylate-hexadecyl methacrylate graft copolymer 217089-89-9P, Acrylic acid-dodecyl methacrylate-methyl acrylate-methyl methacrylate-tetradecyl methacrylate graft copolymer 217089-90-2P, Acrylic acid-dodecyl methacrylate-methyl acrylate-methyl methacrylate-eicosyl methacrylate graft copolymer 217089-91-3P 217089-92-4P, Acrylic acid-dodecyl methacrylate-ethyl methacrylate-methyl acrylate-2,3-(bis)-pentyloxycarbonylpropyl methacrylate graft copolymer 217089-93-5P, Acrylic acid-dodecyl methacrylate-2-cyanoethyl acrylate-methyl acrylate-methyl methacrylate-stearyl acrylate graft copolymer **217089-94-6P** 217089-95-7P, Acrylic acid-dodecyl methacrylate-methyl methacrylate-propyl methacrylate-MA 11 graft copolymer 217089-96-8P, Dodecyl methacrylate-octadecyl acrylate-vinyl acetate-tridecyl methacrylate graft copolymer 217089-97-9P 217089-98-0P 217090-00-1P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(prepared as resin particle for oil-based ink for **ink-jet** making of printing plate)

IT **217089-80-0P 217089-85-5P 217089-94-6P**

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(prepared as resin particle for oil-based ink for **ink-jet** making of printing plate)

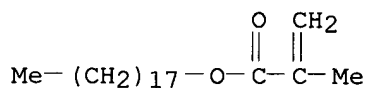
RN 217089-80-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with ethenyl acetate, ethenyl propanoate and octadecyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 32360-05-7

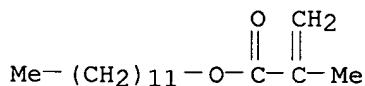
CMF C22 H42 O2



CM 2

CRN 142-90-5

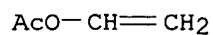
CMF C16 H30 O2



CM 3

CRN 108-05-4

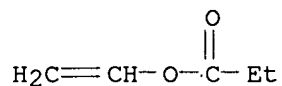
CMF C4 H6 O2



CM 4

CRN 105-38-4

CMF C5 H8 O2



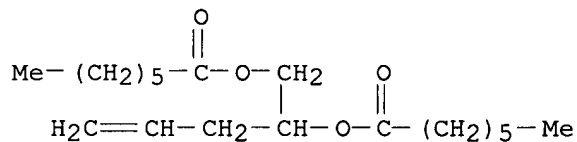
RN 217089-85-5 HCAPLUS

CN Heptanoic acid, 1-(2-propenyl)-1,2-ethanediyl ester, polymer with dodecyl 2-methyl-2-propenoate, ethenyl acetate, 4-ethenylbenzoic acid and ethenyl butanoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 138114-75-7

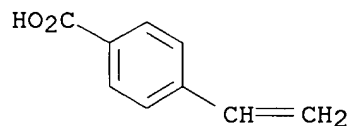
CMF C19 H34 O4



CM 2

CRN 1075-49-6

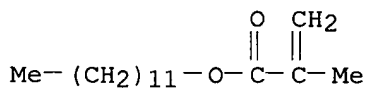
CMF C9 H8 O2



CM 3

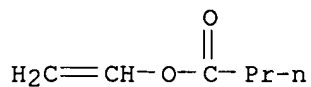
CRN 142-90-5

CMF C16 H30 O2



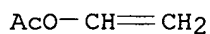
CM 4

CRN 123-20-6  
CMF C6 H10 O2



CM 5

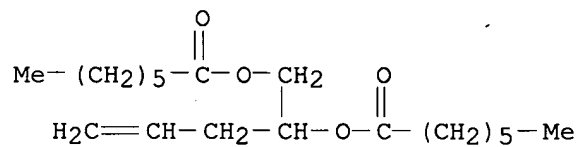
CRN 108-05-4  
CMF C4 H6 O2



RN 217089-94-6 HCAPLUS  
CN Heptanoic acid, 1-(2-propenyl)-1,2-ethanediyl ester, polymer with dodecyl 2-methyl-2-propenoate, ethenyl acetate, ethenylbenzene, ethenyl propanoate and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

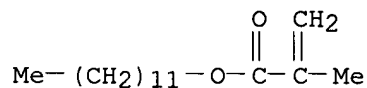
CM 1

CRN 138114-75-7  
CMF C19 H34 O4



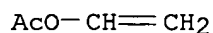
CM 2

CRN 142-90-5  
CMF C16 H30 O2



CM 3

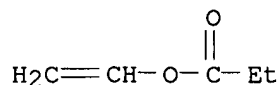
CRN 108-05-4  
CMF C4 H6 O2



CM 4

CRN 105-38-4

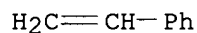
CMF C5 H8 O2



CM 5

CRN 100-42-5

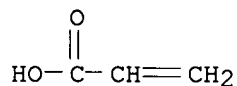
CMF C8 H8



CM 6

CRN 79-10-7

CMF C3 H4 O2



L8 ANSWER 36 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 1998:735163 HCAPLUS  
 DN 130:59081  
 TI Oil-based ink for ink-jet making of printing plate  
 IN Kato, Eiichi  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 25 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D011-00  
 ICS B41C001-10; B41M005-00; C09D155-00; C08F290-04  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other  
 Reprographic Processes)  
 Section cross-reference(s): 42  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 10298473	A2	19981110	JP 1997-346469	19971216

US 6143806 A 20001107 US 1998-8544 19980116  
 PRAI JP 1997-61769 A 19970228  
 JP 1997-19697 A 19970117  
 JP 1997-148624 A 19970522  
 JP 1997-346469 A 19971216

AB The title ink contains a resin particle, which is made of (a) a monofunctional monomer, (b) a monofunctional micro-monomer of mw 1x10<sup>3</sup>-2x10<sup>4</sup> having a soluble component of total carbon number ≥8 polymerizable with (a), and (c) a dispersion-stabilizing resin, dispersed in a non-aqueous solution of elec. resistance ≥109 Ωcm and dielec. ≤3.5. The ink can be used in ink-jet plate-making and shows superior re-dispersing property, storage stability and printing ability.

ST oil based printing plate making ink; graft copolymer oil based ink

IT Ink-jet printing

Inks

(oil-based ink for ink-jet making of printing plate containing specified copolymer)

IT 139104-87-3P 139104-90-8P 139105-03-6P 139105-08-1P 139105-12-7P  
 147130-31-2P 147130-40-3P 147130-42-5P 147130-44-7P 147130-50-5P  
 214835-07-1P 215877-61-5P 215877-71-7P 217089-79-7DP,  
 2,3-Dipentanoyloxypropyl methacrylate homopolymer, carboxy terminated,  
 reaction product with glycidyl methacrylate 217188-65-3P 217188-75-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(prepared as micro-monomer for oil-based ink for ink-jet making of printing plate)

IT 134436-95-6P, Dodecyl methacrylate-octadecyl methacrylate-vinyl acetate graft copolymer 215510-51-3P, Acrylic acid-dodecyl methacrylate-methyl acrylate-methyl methacrylate-octadecyl acrylate graft copolymer  
**217089-80-0P**, Dodecyl methacrylate-vinyl acetate-vinyl propionate-octadecyl methacrylate graft copolymer 217089-81-1P, Dodecyl methacrylate-vinyl acetate-crotonic acid-2,3-dipentylcarbonyloxypropyl methacrylate graft copolymer 217089-83-3P, Dodecyl methacrylate-vinyl acetate-N-vinyl-2-pyrrolidone-undecanoyloxyethyl methacrylate graft copolymer **217089-85-5P** 217089-87-7P, Acrylic acid-dodecyl methacrylate-ethyl acrylate-methyl methacrylate graft copolymer  
 217089-88-8P, Acrylic acid-dodecyl methacrylate-methyl acrylate-methyl methacrylate-hexadecyl methacrylate graft copolymer 217089-89-9P, Acrylic acid-dodecyl methacrylate-methyl acrylate-methyl methacrylate-tetradecyl methacrylate graft copolymer 217089-91-3P  
 217089-93-5P, Acrylic acid-dodecyl methacrylate-2-cyanoethyl acrylate-methyl acrylate-methyl methacrylate-octadecyl acrylate graft copolymer **217089-94-6P** 217089-95-7P 217089-96-8P  
 217089-97-9P 217089-98-0P 217090-03-4P, Acrylic acid-dodecyl methacrylate-methyl acrylate-methyl methacrylate-docosyl methacrylate graft copolymer 217090-04-5P, Acrylic acid-dodecyl methacrylate-ethyl methacrylate-methyl acrylate-2,3-dipentanoyloxypropyl methacrylate graft copolymer 217090-05-6P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(prepared as resin particle for oil-based ink for ink-jet making of printing plate)

IT **217089-80-0P**, Dodecyl methacrylate-vinyl acetate-vinyl propionate-octadecyl methacrylate graft copolymer **217089-85-5P**  
**217089-94-6P**

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(prepared as resin particle for oil-based ink for ink-

jet making of printing plate)

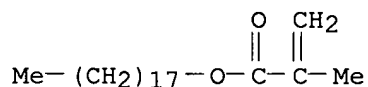
RN 217089-80-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with ethenyl acetate, ethenyl propanoate and octadecyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 32360-05-7

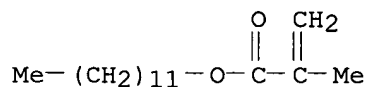
CMF C22 H42 O2



CM 2

CRN 142-90-5

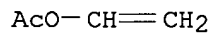
CMF C16 H30 O2



CM 3

CRN 108-05-4

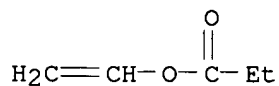
CMF C4 H6 O2



CM 4

CRN 105-38-4

CMF C5 H8 O2

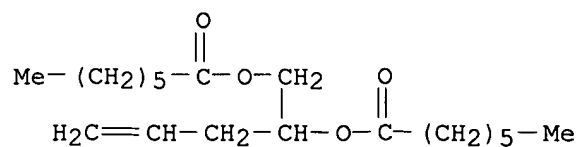


RN 217089-85-5 HCAPLUS

CN Heptanoic acid, 1-(2-propenyl)-1,2-ethanediyl ester, polymer with dodecyl 2-methyl-2-propenoate, ethenyl acetate, 4-ethenylbenzoic acid and ethenyl butanoate, graft (9CI) (CA INDEX NAME)

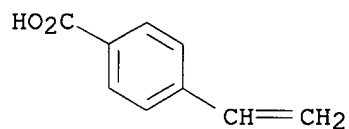
CM 1

CRN 138114-75-7  
CMF C19 H34 O4



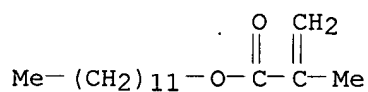
CM 2

CRN 1075-49-6  
CMF C9 H8 O2



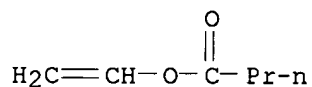
CM 3

CRN 142-90-5  
CMF C16 H30 O2



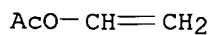
CM 4

CRN 123-20-6  
CMF C6 H10 O2



CM 5

CRN 108-05-4  
CMF C4 H6 O2



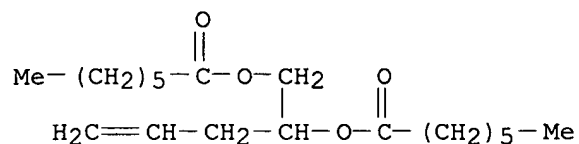
RN 217089-94-6 HCAPLUS

CN Heptanoic acid, 1-(2-propenyl)-1,2-ethanediyl ester, polymer with dodecyl 2-methyl-2-propenoate, ethenyl acetate, ethenylbenzene, ethenyl propanoate and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 138114-75-7

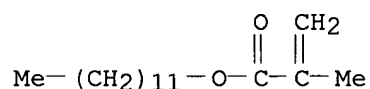
CMF C19 H34 O4



CM 2

CRN 142-90-5

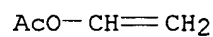
CMF C16 H30 O2



CM 3

CRN 108-05-4

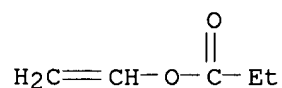
CMF C4 H6 O2



CM 4

CRN 105-38-4

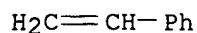
CMF C5 H8 O2



CM 5

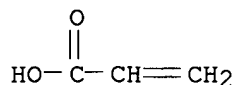
CRN 100-42-5

CMF C8 H8



CM 6

CRN 79-10-7  
CMF C3 H4 O2

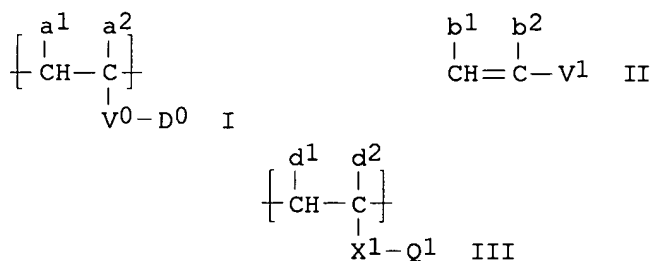


L8 ANSWER 37 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
AN 1998:728370 HCAPLUS  
DN 130:59080  
TI Method and oil-based ink for making ink-jet type lithographic printing plate  
IN Kato, Eiichi  
PA Fuji Photo Film Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 30 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM C09D011-00  
ICS B41C001-10; B41M005-00; B41N001-14  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
Section cross-reference(s): 42

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10298472	A2	19981110	JP 1997-123219	19970425
	US 6127452	A	20001003	US 1998-66600	19980427
PRAI	JP 1997-123219	A	19970425		

GI



AB In the oil-based ink for ink-jet type lithog. printing plate made from dispersed resin particles in a non-aqueous carrier solution, the resin particles are made by copolymn. of a monofunctional monomer and a macromonomer which

has a monofunctional main chain repeating unit I having a polymerizable double bond group II at the end of the chain in the presence of a dispersion stabilizer resin containing a macromonomer of main component III having polymerizable double bond II at the end of the chain. The ink shows the excellent redispersion, the long shelf-life, and the excellent printing durability.

ST oil ink jet lithog printing plate

IT Inks

(jet-printing; method and oil-based ink for making ink-jet type lithog. printing plate)

IT Inks

(lithog.; method and oil-based ink for making ink-jet type lithog. printing plate)

IT Ink-jet printing

Lithographic plates

(method and oil-based ink for making ink-jet type lithog. printing plate)

IT 124973-68-8P, Octadecyl methacrylate-styrene graft copolymer

138005-15-9DP, carboxy terminated, ester with glycidyl methacrylate

139104-87-3P 139104-90-8P 139105-03-6P 139105-08-1P 139105-12-7P

141414-84-8P 141759-87-7P 142245-68-9P 143709-80-2P 212135-96-1P

215461-36-2P 215877-33-1P 215877-54-6P, Thioethanol-tetradecyl

methacrylate telomer, ester with 2-carboxyethyl acrylate 215877-61-5P

215877-71-7P 216983-08-3P 216983-09-4P 216983-10-7P 216983-11-8P

216983-12-9P 216983-13-0P 216983-14-1P 217076-83-0P 217076-85-2P

RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(resin particles for oil-based ink for making ink-jet type lithog. printing plate)

IT 163180-65-2P **215461-33-9P** 215461-42-0P **216983-16-3P**

216983-17-4P 216983-18-5P 216983-20-9P 216983-21-0P 216983-22-1P

216983-24-3P 216983-25-4P 216983-26-5P 216983-27-6P 216983-28-7P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(resin particles for oil-based ink for making **ink-jet** type lithog. printing plate)

IT **215461-33-9P 216983-16-3P**

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(resin particles for oil-based ink for making **ink-jet** type lithog. printing plate)

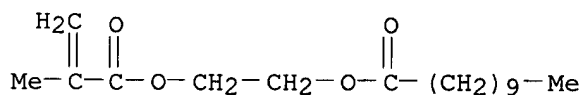
RN 215461-33-9 HCAPLUS

CN Undecanoic acid, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with ethenyl acetate and ethenyl propanoate, graft (9CI) (CA INDEX NAME)

CM 1

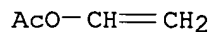
CRN 139720-83-5

CMF C17 H30 O4



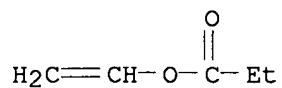
CM 2

CRN 108-05-4  
CMF C4 H6 O2



CM 3

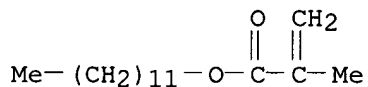
CRN 105-38-4  
CMF C5 H8 O2



RN 216983-16-3 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with ethenyl acetate  
and ethenyl propanoate, graft (9CI) (CA INDEX NAME)

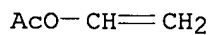
CM 1

CRN 142-90-5  
CMF C16 H30 O2



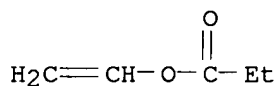
CM 2

CRN 108-05-4  
CMF C4 H6 O2



CM 3

CRN 105-38-4  
CMF C5 H8 O2



L8 ANSWER 38 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 1998:661939 HCAPLUS  
 DN 129:349102  
 TI Oil-based ink for ink-jet photolithographic printing plate making  
 IN Kato, Eiichi  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 34 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D011-00  
 ICS B41C001-10; B41M005-00  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other  
 Reprographic Processes)  
 Section cross-reference(s): 35, 38, 42

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10273612	A2	19981013	JP 1997-95028	19970328
PRAI	JP 1997-95028		19970328		
AB	The oil-based jet-printing ink contains resin particles dispersed in a nonaq. medium having elec. resistivity $\geq 10^9 \Omega\text{-cm}$ and dielec. constant $\leq 3.5$ . The resin particle is prepared by polymerization followed by granulation of $\geq 1$ monofunctional monomers soluble in nonaq. solvents (whose polymers are insol. in the solvents) and $\geq 1$ macromonomers having weight average mol. weight $\leq 2 + 10^4$ , $\text{CHAlCa2(VOD0)}$ as the repeating units, and $\text{CHb1:Cb2V1}$ as the terminal groups in the presence of $\geq 1$ nonaq. solvent-soluble comb polymers made of macromonomers with 1 terminal C:C and having weight average mol. weight (Mw) $1 + 10^3 - 2 + 10^4$ and $\text{CHd1Cd2(V2D1)}$ as the repeating units in the backbones and/or comb parts as dispersion stabilizers [ $\text{V0} = \text{CO}_2$ , $\text{OCO}$ , $(\text{CH}_2)_r\text{CO}_2$ , $(\text{CH}_2)_r\text{OCO}$ , $\text{O}$ , $\text{SO}_2$ , $\text{CONHCO}_2$ , $\text{CONHCONH}$ , $\text{COND11}$ , $\text{SO2ND11}$ , phenylene (D11 is defined); $r = 1-4$ ; $a1$ , $a2$ , $b1$ , $b2$ , $d1$ , $d2 = \text{H}$ , halogen, cyano, hydrocarbyl, $\text{CO2D12}$ (inserted by hydrocarbylene, D12 is defined); $\text{D0} = \text{C8-22 hydrocarbyl}$ , $(\text{AlB1})_m(\text{A2B2})_n\text{D21}$ ( $\text{A1}$ , $\text{A2}$ , $\text{B1}$ , $\text{B2}$ , $\text{D21}$ are defined); $\text{V1} = \text{CO}_2$ , $\text{COCHCO}_2$ , $\text{CONHCONH}$ , $\text{CONH}$ , phenylene; $\text{V2} = \text{CO}_2$ , $\text{OCO}$ , $\text{O}$ , phenylene; $\text{D1} = \text{C10-23 alkyl}$ , $\text{C10-23 alkenyl}$ ]. The ink is applied by jet printing on a water-resistant support having a printable hydrophilic surface to give a lithog. printing plate. The ink shows long shelf life, durability, and dispersibility after storage.				
ST	oil based ink lithog plate making; ink jet lithog printing plate making; graft copolymer particle dispersion oil ink; shelf life ink lithog plate making; comb polymer dispersion stabilizer graft polymn				
IT	Polymers, uses RL: TEM (Technical or engineered material use); USES (Uses) (graft; oil-based ink containing graft polymer for ink-jet lithog. printing plate making)				
IT	Inks (jet-printing; oil-based ink containing graft polymer for ink-jet lithog. printing plate making)				
IT	Ink-jet printing Lithographic plates (oil-based ink containing graft polymer for ink-jet lithog. printing plate making)				
IT	Macromonomers RL: RCT (Reactant); RACT (Reactant or reagent) (oil-based ink for ink-jet lithog. printing plate making containing comb polymer dispersion stabilizer prepared from)				

IT 79-41-4DP, reaction products with graft copolymer 107-18-6DP, 2-Propen-1-ol, reaction products with dodecyl methacrylate-octadecyl methacrylate graft copolymer, preparation 1074-61-9DP, reaction products with dodecyl methacrylate-octadecyl methacrylate graft copolymer 21734-63-4DP, reaction products with dodecyl methacrylate-octadecyl methacrylate graft copolymer 25012-65-1DP, reaction products with dodecyl methacrylate-octadecyl methacrylate graft copolymer 25719-52-2P, Poly(dodecyl methacrylate) 31770-04-4DP, reaction products with dodecyl methacrylate-octadecyl methacrylate graft copolymer 44915-40-4DP, reaction products with dodecyl methacrylate-octadecyl methacrylate graft copolymer 81524-96-1DP, reaction products with dodecyl methacrylate-octadecyl methacrylate graft copolymer 134436-95-6P 138114-49-5P 212135-87-0P, Isopropyl methacrylate-octadecyl methacrylate graft copolymer 212135-94-9DP, reaction products with methacrylic acid 214674-46-1P 214674-47-2P 214674-48-3P 215510-34-2P 215510-36-4P 215510-37-5P 215510-38-6P 215510-39-7P  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(comb, dispersion stabilizer; in manufacture of oil-based ink containing graft

polymer for ink-jet lithog. printing plate making)  
 IT 75-08-1DP, Thioethanol, reaction products with dodecyl methacrylate-octadecyl acrylate copolymer and carboxyethyl acrylate 106-91-2DP, reaction products with poly(Me methacrylate) and mercaptopropionic acid 2638-94-0DP, 4,4'-Azobis(4-cyanovaleric acid), reaction products with poly(octadecyl methacrylate) and glycidyl methacrylate 9003-32-1DP, Poly(ethyl acrylate), reaction products with poly(Me methacrylate) and mercaptopropionic acid 9003-53-6DP, Polystyrene, reaction products with poly(Me methacrylate) and mercaptopropionic acid 9003-63-8DP, Poly(butyl methacrylate), reaction products with poly(Me methacrylate) and mercaptopropionic acid 9011-14-7DP, Poly(methyl methacrylate), reaction products with mercaptopropionic acid and glycidyl methacrylate 24615-84-7DP, 2-Carboxyethyl acrylate, reaction products with dodecyl methacrylate-octadecyl acrylate copolymer and thioethanol 25639-21-8DP, Poly(octadecyl methacrylate), reaction products with poly(Me methacrylate) and mercaptopropionic acid 25719-52-2DP, Poly(dodecyl methacrylate), reaction products with poly(Me methacrylate) and mercaptopropionic acid 30232-12-3DP, Mercaptopropionic acid, reaction products with poly(Me methacrylate) and glycidyl methacrylate 77756-42-4DP, reaction products with poly(Me methacrylate) and mercaptopropionic acid 135784-92-8DP, reaction products with poly(Me methacrylate) and mercaptopropionic acid 138005-06-8DP, reaction products with poly(Me methacrylate) and mercaptopropionic acid 138114-86-0DP, reaction products with poly(Me methacrylate) and mercaptopropionic acid 140693-68-1DP, Dodecyl methacrylate-octadecyl acrylate copolymer, reaction products with thioethanol and 2-carboxyethyl acrylate 158275-95-7DP, reaction products with dodecyl methacrylate-octadecyl acrylate copolymer and thioethanol 163545-36-6DP, reaction products with poly(Me methacrylate) and mercaptopropionic acid 212135-79-0DP, reaction products with poly(Me methacrylate) and mercaptopropionic acid 214674-36-9DP, reaction products with poly(Me methacrylate) and mercaptopropionic acid 215461-20-4DP, reaction products with dodecyl methacrylate-octadecyl acrylate copolymer and thioethanol 215510-30-8DP, reaction products with poly(Me methacrylate) and mercaptopropionic acid 215510-31-9DP, reaction products with dodecyl methacrylate-octadecyl acrylate copolymer and thioethanol 215510-32-0DP, reaction products with dodecyl methacrylate-octadecyl acrylate copolymer and thioethanol 215510-33-1DP,

reaction products with dodecyl methacrylate-octadecyl acrylate copolymer and thioethanol

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(macromonomers; oil-based ink for ink-jet lithog. printing plate making containing comb polymer dispersion stabilizer prepared from)

IT 132176-90-0P, Octadecyl methacrylate-vinyl acetate graft copolymer  
132176-92-2P, Dodecyl methacrylate-vinyl acetate graft copolymer  
213547-99-0P **214674-57-4P** 214674-58-5P 214786-97-7P  
215510-41-1P 215510-42-2P 215510-43-3P 215510-44-4P 215510-45-5P  
215510-47-7P 215510-48-8P 215510-49-9P **215510-50-2P**  
215510-51-3P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(oil-based ink containing graft polymer for **ink-jet** lithog. printing plate making)

IT **214674-57-4P 215510-50-2P**  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(oil-based ink containing graft polymer for **ink-jet** lithog. printing plate making)

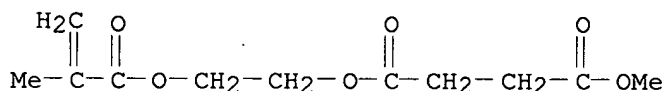
RN 214674-57-4 HCAPLUS

CN Butanedioic acid, methyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with ethenyl acetate and ethenyl propanoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 135739-92-3

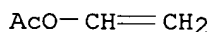
CMF C11 H16 O6



CM 2

CRN 108-05-4

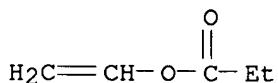
CMF C4 H6 O2



CM 3

CRN 105-38-4

CMF C5 H8 O2

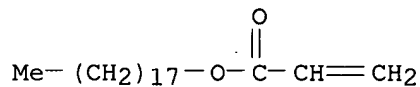


RN 215510-50-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with ethenyl acetate, ethenylbenzene, ethenyl propanoate and octadecyl 2-propenoate, graft (9CI)  
(CA INDEX NAME)

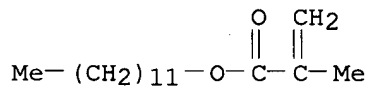
CM 1

CRN 4813-57-4  
CMF C21 H40 O2



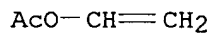
CM 2

CRN 142-90-5  
CMF C16 H30 O2



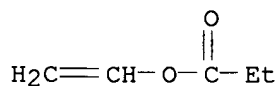
CM 3

CRN 108-05-4  
CMF C4 H6 O2



CM 4

CRN 105-38-4  
CMF C5 H8 O2



CM 5

CRN 100-42-5  
CMF C8 H8

$$\text{H}_2\text{C}=\text{CH}-\text{Ph}$$

L8 ANSWER 39 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 1998:661938 HCAPLUS  
 DN 129:349101  
 TI Oil-based ink for ink-jet lithographic printing plate making  
 IN Kato, Eiichi  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 35 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D011-00  
 ICS B41M005-00  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 Section cross-reference(s): 35, 38, 42

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10273611	A2	19981013	JP 1997-95029	19970328
PRAI	JP 1997-95029		19970328		
AB	<p>The oil-based jet-printing ink contains resin particles dispersed in a nonaq. medium having elec. resistivity <math>\geq 10^9 \Omega\text{-cm}</math> and dielec. constant <math>\leq 3.5</math>. The resin particle is prepared by polymerization of <math>\geq 1</math> monofunctional monomers soluble in nonaq. solvent (whose polymers are insol. in the solvents) and <math>\geq 1</math> macromonomers having weight average mol. weight <math>\leq 2 + 10^4</math>, <math>\text{CHa1Ca2(VOD0)}</math> as the repeating units, and <math>\text{CHb1:Cb2V1}</math> as the terminal groups in the presence of <math>\geq 1</math> nonaq. solvent-soluble polymers having <math>\text{CHd1Cd2(X1Y1)}</math> as the repeating units, whose backbones are partially crosslinked, as dispersion stabilizers [<math>\text{V0} = \text{CO}_2</math>, <math>\text{OCO}</math>, <math>(\text{CH}_2)\text{rCO}_2</math>, <math>(\text{CH}_2)\text{rOCO}</math>, <math>\text{O}</math>, <math>\text{SO}_2</math>, <math>\text{CONHCO}_2</math>, <math>\text{CONHCONH}</math>, <math>\text{COND11}</math>, <math>\text{SO2ND11}</math>, phenylene (<math>\text{D11}</math> is defined); <math>\text{r} = 1-4</math>; <math>\text{a1}</math>, <math>\text{a2}</math>, <math>\text{b1}</math>, <math>\text{b2}</math>, <math>\text{d1}</math>, <math>\text{d2} = \text{H}</math>, halogen, cyano, hydrocarbyl, <math>\text{CO2D12}</math> (inserted by hydrocarbylene, <math>\text{D12}</math> is defined); <math>\text{D0} = \text{C8-22 hydrocarbyl}</math>, <math>(\text{A1B1})\text{m}(\text{A2B2})\text{nD21}</math> (<math>\text{A1}</math>, <math>\text{A2}</math>, <math>\text{B1}</math>, <math>\text{B2}</math>, <math>\text{D21}</math> are defined); <math>\text{V1} = \text{CO}_2</math>, <math>\text{COCHCO}_2</math>, <math>\text{CONHCONH}</math>, <math>\text{CONH}</math>, phenylene; <math>\text{X1} = \text{CO}_2</math>, <math>\text{OCO}</math>, <math>(\text{CH}_2)\text{xOCO}</math>, <math>(\text{CH}_2)\text{xCO}_2</math>, <math>\text{O}</math>; <math>\text{x} = 1-3</math>; <math>\text{Y1} = \text{C}\geq 10</math> aliphatic group]. The ink is applied by jet printing on an ink-receiving layer having water contact angle <math>\geq 50^\circ</math> (containing <math>\text{ZnO}</math> and a biner resin) on a water-resistant support and the areas except the image are desensitized by chemical reaction to give the lithog. printing plate. The ink shows long shelf life, durability, and dispersibility after storage.</p>				
ST	oil based ink lithog plate making; ink jet lithog printing plate making; graft copolymer particle dispersion oil ink; shelf life ink lithog plate making				
IT	<p>Polymers, preparation          RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)          (graft; oil-based inks containing graft copolymer particles for ink jet lithog. plate making)</p>				
IT	<p>Macromonomers          RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)          (in oil-based inks containing graft copolymer particles for ink jet lithog. plate making)</p>				
IT	Inks				

(jet-printing, oil-based; oil-based inks containing graft copolymer particles for ink jet lithog. plate making)

- IT Ink-jet printing  
Lithographic plates  
(oil-based inks containing graft copolymer particles for ink jet lithog. plate making)
- IT 36497-24-2P, Hexadecyl methacrylate-vinylbenzene copolymer 55348-35-1P, Divinylbenzene-dodecyl methacrylate-styrene copolymer 61255-17-2P  
**120534-27-2P**, Divinyl adipate-dodecyl methacrylate-vinyl acetate copolymer 122324-74-7P, Divinylbenzene-octadecyl methacrylate copolymer 130805-21-9P, Divinylbenzene-tridecyl methacrylate copolymer 148532-67-6P, Dodecyl methacrylate-octyl methacrylate-trivinylbenzene copolymer 148532-68-7P, Butyl methacrylate-ethylene glycol dimethacrylate-octadecyl methacrylate copolymer 148532-69-8P  
**148532-70-1P**, Octadecyl methacrylate-2-(trimethoxysilyloxy)ethyl methacrylate-vinyl methacrylate copolymer 148532-71-2P, Allyl methacrylate-tetradecyl methacrylate copolymer 148532-72-3P, Diethylene glycol dimethacrylate-methacrylic acid-octadecyl methacrylate copolymer **148532-81-4P**, Divinyl adipate-hexadecyl methacrylate copolymer 148575-85-3P 148575-86-4P, Polyethylene glycol diacrylate-tetradecyl methacrylate copolymer 159133-93-4P, 2-Hydroxyethyl methacrylate-octadecyl methacrylate-triethylene glycol dimethacrylate copolymer 159291-23-3P, Octadecyl methacrylate-triethylene glycol diacrylate-2-(trimethoxysilyloxy)ethyl methacrylate copolymer  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
(dispersing agent; in oil-based inks containing graft copolymer particles for **ink jet** lithog. plate making)
- IT 75-08-1DP, Thioethanol, reaction products with poly(tetradecyl methacrylate) and carboxyethyl acrylate 106-91-2DP, reaction products with poly(octadecyl methacrylate) and mercaptopropionic acid 107-96-0DP, 3-Mercaptopropionic acid, reaction products with poly(octadecyl methacrylate) and glycidyl methacrylate 2638-94-0DP, 4,4'-Azobis(4-cyanovaleric acid), reaction products with poly(dioctanoylpropyl methacrylate) and glycidyl methacrylate 24615-84-7DP, 2-Carboxyethyl acrylate, reaction products with poly(tetradecyl methacrylate) and thioethanol 25639-21-8DP, Poly(octadecyl methacrylate), reaction product with 3-mercaptopropionic acid and glycidyl methacrylate 25719-52-2DP, Poly(dodecyl methacrylate), reaction product with 3-mercaptopropionic acid and glycidyl methacrylate 25986-77-0DP, Poly(octadecyl acrylate), reaction product with 3-mercaptopropionic acid and glycidyl methacrylate 25986-80-5DP, Poly(hexadecyl methacrylate), reaction product with 3-mercaptopropionic acid and glycidyl methacrylate 30525-99-6DP, Poly(tetradecyl methacrylate), reaction products with thioethanol and 2-carboxyethyl acrylate 41630-11-9DP, Poly(tridecyl methacrylate), reaction product with 3-mercaptopropionic acid and glycidyl methacrylate 87625-18-1DP, reaction products with thioethanol and carboxyethyl chloroacrylate 138114-76-8DP, reaction product with 3-mercaptopropionic acid and glycidyl methacrylate 138114-83-7DP, reaction product with 3-mercaptopropionic acid and glycidyl methacrylate 138114-97-3DP, reaction product with 3-mercaptopropionic acid and glycidyl methacrylate 138114-99-5DP, reaction product with 3-mercaptopropionic acid and glycidyl methacrylate 140693-68-1DP, Dodecyl methacrylate-octadecyl acrylate copolymer, reaction products with thioethanol and carboxyethyl cyanoacrylate 158275-95-7DP, reaction products with thioethanol and polymethacrylate 166022-41-9DP, reaction products with thioethanol and carboxyethyl styrenecarboxylate 213547-73-0DP, reaction products with thioethanol and polymethacrylate

215461-03-3DP, reaction product with 3-mercaptopropionic acid and glycidyl methacrylate 215461-20-4DP, reaction products with thioethanol and polymethacrylate 215461-24-8DP, reaction products with azobis(cyanovaleric acid) and glycidyl methacrylate 215461-52-2DP, reaction product with 3-mercaptopropionic acid and glycidyl methacrylate  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(macromonomer; in oil-based inks containing graft copolymer particles for ink jet lithog. plate making)

IT 132176-90-0P, Octadecyl methacrylate-vinyl acetate graft copolymer  
 132176-92-2P, Dodecyl methacrylate-vinyl acetate graft copolymer  
 138114-29-1P 138114-33-7P 139720-84-6P 141288-13-3P, Tridecyl methacrylate-vinyl acetate graft copolymer 141288-18-8P, Hexadecyl methacrylate-vinyl acetate graft copolymer 147046-12-6P 163180-65-2P, Octadecyl acrylate-vinyl acetate graft copolymer 213548-12-0P  
 215461-27-1P 215461-29-3P 215461-30-6P 215461-32-8P  
**215461-33-9P** 215461-34-0P 215461-35-1P 215461-36-2P  
 215461-37-3P 215461-38-4P 215461-39-5P 215461-40-8P  
**215461-41-9P** 215461-42-0P 215461-43-1P 215461-44-2P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(oil-based inks containing graft copolymer particles for ink jet lithog. plate making)

IT 120534-27-2P, Divinyl adipate-dodecyl methacrylate-vinyl acetate copolymer **148532-70-1P**, Octadecyl methacrylate-2-(trimethoxysilyloxy)ethyl methacrylate-vinyl methacrylate copolymer **148532-81-4P**, Divinyl adipate-hexadecyl methacrylate copolymer  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(dispersing agent; in oil-based inks containing graft copolymer particles for ink jet lithog. plate making)

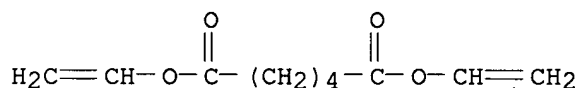
RN 120534-27-2 HCAPLUS

CN Hexanedioic acid, diethenyl ester, polymer with dodecyl 2-methyl-2-propenoate and ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 4074-90-2

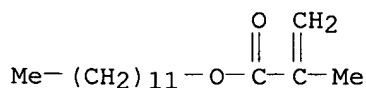
CMF C10 H14 O4



CM 2

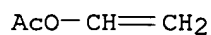
CRN 142-90-5

CMF C16 H30 O2



CM 3

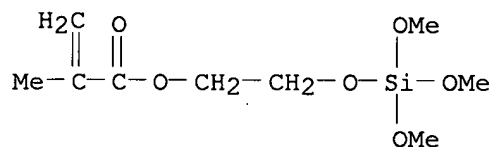
CRN 108-05-4  
CMF C4 H6 O2



RN	148532-70-1	HCAPLUS
CN	2-Propenoic acid, 2-methyl-, ethenyl ester, polymer with octadecyl 2-methyl-2-propenoate and 2-[(trimethoxysilyl)oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)	

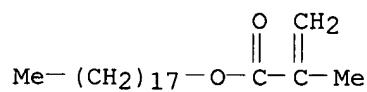
CM 1

CRN 120358-73-8  
CMF C9 H18 O6 Si



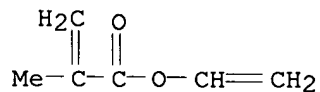
CM 2

CRN 32360-05-7  
CMF C22 H42 O2



CM 3

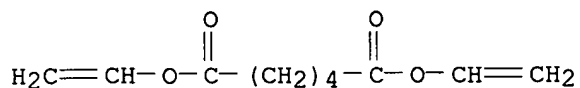
CRN 4245-37-8  
CMF C6 H8 O2



RN	148532-81-4	HCAPLUS
CN	Hexanedioic acid, diethenyl ester, polymer with hexadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)	

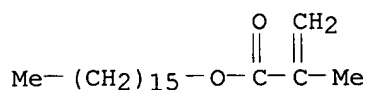
CM 1

CRN 4074-90-2  
CMF C10 H14 O4



CM 2

CRN 2495-27-4  
CMF C20 H38 O2



IT **215461-33-9P 215461-41-9P**

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

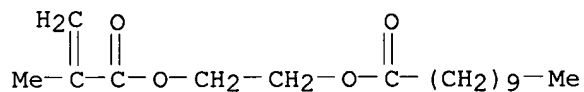
(oil-based inks containing graft copolymer particles for **ink jet** lithog. plate making)

RN 215461-33-9 HCAPLUS

CN Undecanoic acid, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with ethenyl acetate and ethenyl propanoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 139720-83-5  
CMF C17 H30 O4



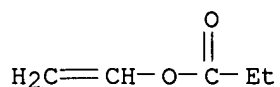
CM 2

CRN 108-05-4  
CMF C4 H6 O2

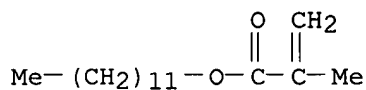


CM 3

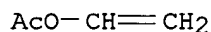
CRN 105-38-4  
CMF C5 H8 O2



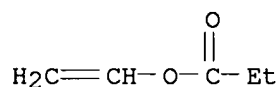
RN 215461-41-9 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with ethenyl acetate, ethenylbenzene and ethenyl propanoate, graft (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 142-90-5  
 CMF C16 H30 O2



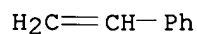
CM 2  
 CRN 108-05-4  
 CMF C4 H6 O2



CM 3  
 CRN 105-38-4  
 CMF C5 H8 O2



CM 4  
 CRN 100-42-5  
 CMF C8 H8



L8 ANSWER 40 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 1998:661213 HCAPLUS  
 DN 129:337657  
 TI Oil-based ink for making lithographic printing plate by using ink jet method

IN Kato, Eiichi; Ohsawa, Sadao; Ishii, Kazuo  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 23 pp.  
 CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D011-00

ICS C08F291-00; C08L051-00; B41M005-00

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10265726	A2	19981006	JP 1997-231273	19970827
PRAI	JP 1997-27158		19970127		

AB The lithog. printing plate comprises an image-receiving layer giving a contact angle  $\geq 50^\circ$  with water and containing ZnO and a binder resin on a water-resistant support. The oil-based ink contains resin particles dispersed in a nonaq. liquid having elec. resistivity  $\geq 10^9 \Omega \cdot \text{cm}$  and a dielec. constant  $\leq 3.5$ . An image formed on the image-receiving layer by the ink is desensitized by a chemical process, thereby forming a lithog. printing plate. The resin particles made from (1)  $\geq 1$  monofunctional monomer which is soluble in a nonaq. solvent having affinity to the nonaq. liquid and becomes insol. upon polymerization,

(2)  $\geq 1$  monomer represented by  $\text{a1HC}=\text{Ca2}(\text{U1-E1})$  ( $\text{E1} = \text{C} \geq 8$  aliphatic;  $\text{a1,2} =$  substituent;  $\text{U1} = \text{COO}, \text{CONH}, \text{etc.}$ ) polymerizable with (1), and  $\geq 1$  dispersion stabilizing resin free of grafting groups. The ink provided excellent re-dispersibility and storage stability.

ST lithog printing plate ink jet; dispersion stabilization resin particle

IT Ink-jet printing

Inks

Lithographic plates

(oil-based ink for making lithog. printing plate by using ink jet method)

IT 102327-78-6P, Crotonic acid-octadecyl methacrylate-vinyl acetate copolymer  
 139357-99-6P, Dodecyl methacrylate-octadecyl methacrylate-vinyl acetate copolymer  
 214625-56-6P, Acrylic acid-dodecyl methacrylate-methyl methacrylate-methyl acrylate-octadecyl acrylate copolymer  
**214625-58-8P**, Dodecyl methacrylate-vinyl acetate-vinyl oleate copolymer  
 214625-59-9P, Dodecyl methacrylate-octadecylvinyl ether-vinyl acetate copolymer  
 214625-60-2P, Dodecyl methacrylate-hexadecyl methacrylate-vinyl acetate copolymer **215316-22-6P**, Tridecyl methacrylate-2-hydroxyethyl methacrylate-vinyl acetate-vinyl stearate copolymer  
 215316-36-2P 215316-42-0P 215316-48-6P 215316-54-4P 215316-58-8P  
 215316-62-4P, Acrylic acid-dodecyl methacrylate-octadecyl  $\alpha$ -chloroacrylate-methyl acrylate-methyl methacrylate-octadecyl acrylate copolymer  
 215316-64-6P, Acrylic acid-dodecyl methacrylate-methyl acrylate-methyl methacrylate-octadecyl acrylate-tetradecyl  $\alpha$ -cyanoacrylate copolymer 215316-67-9P  
 215316-70-4P 215316-72-6P 215316-75-9P **215316-79-3P**  
 215316-83-9P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(oil-based ink for making lithog. printing plate by using ink jet method)

IT **214625-58-8P**, Dodecyl methacrylate-vinyl acetate-vinyl oleate

copolymer **215316-22-6P**, Tridecyl methacrylate-2-hydroxyethyl methacrylate-vinyl acetate-vinyl stearate copolymer **215316-79-3P**  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(oil-based ink for making lithog. printing plate by using **ink jet** method)

RN 214625-58-8 HCAPLUS

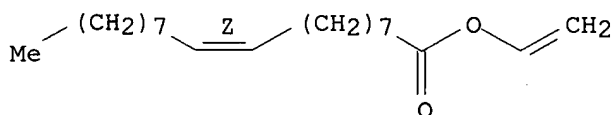
CN 9-Octadecenoic acid (9Z)-, ethenyl ester, polymer with dodecyl 2-methyl-2-propenoate and ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 3896-58-0

CMF C20 H36 O2

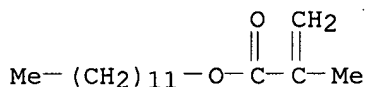
Double bond geometry as shown.



CM 2

CRN 142-90-5

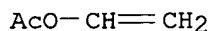
CMF C16 H30 O2



CM 3

CRN 108-05-4

CMF C4 H6 O2



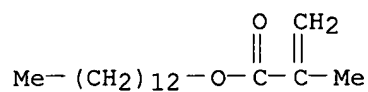
RN 215316-22-6 HCAPLUS

CN Octadecanoic acid, ethenyl ester, polymer with ethenyl acetate, 2-hydroxyethyl 2-methyl-2-propenoate and tridecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

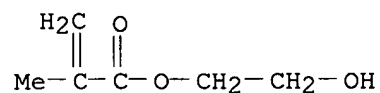
CRN 2495-25-2

CMF C17 H32 O2



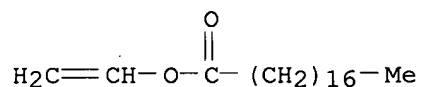
CM 2

CRN 868-77-9  
CMF C6 H10 O3



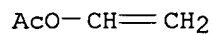
CM 3

CRN 111-63-7  
CMF C20 H38 O2



CM 4

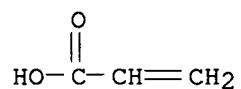
CRN 108-05-4  
CMF C4 H6 O2



RN 215316-79-3 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with ethenyl acetate, ethenylbenzene, ethenyl propanoate, octadecyl 2-propenoate and potassium 2-propenoate (9CI) (CA INDEX NAME)

CM 1

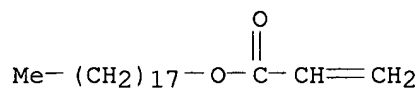
CRN 10192-85-5  
CMF C3 H4 O2 . K



● K

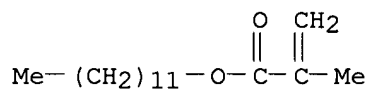
CM 2

CRN 4813-57-4  
CMF C21 H40 O2



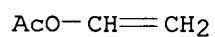
CM 3

CRN 142-90-5  
CMF C16 H30 O2



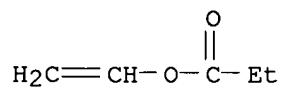
CM 4

CRN 108-05-4  
CMF C4 H6 O2



CM 5

CRN 105-38-4  
CMF C5 H8 O2



CM 6

CRN 100-42-5  
CMF C8 H8

H<sub>2</sub>C=CH-Ph

L8 ANSWER 41 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
AN 1998:642135 HCAPLUS  
DN 129:323878  
TI Method and oil-based ink for making ink jet-type lithographic printing plate  
IN Kato, Eiichi; Osawa, Sadao; Ishii, Kazuo  
PA Fuji Photo Film Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 30 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM C09D011-00  
ICS B41C001-10; B41M005-00; C09D155-00; C08F290-04  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
Section cross-reference(s): 35, 38

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10259338	A2	19980929	JP 1997-346468	19971216
	US 6140389	A	20001031	US 1998-9506	19980120
PRAI	JP 1997-21015	A	19970120		
	JP 1997-88821	A	19970324		
	JP 1997-346468	A	19971216		
	JP 1997-353694	A	19971222		

AB The oil-based ink contains a resin particle which is obtained by the crosslinking reaction of a monofunctional monomer (A), becoming insol. in a nonaq. solvent upon the polymerization, with a dispersion stabilizing resin (P), capable of polymerizing with the monomer only through a polymerizable double bond disposed at one end of the backbone chain. An image is formed on an image-receiving layer on a water-resistant support containing Zn oxide and a binder resin by using an ink-jet printing method, followed by desensitizing non-image areas. The monomer (A) is represented by [HalC-Ca2(X1Y1)] (X1 = COO< OCO, etc.; Y1 = C6-32 aliphatic; a1,2 = H, halo, cyano, etc.) which has the end polymerizable end group.

ST ink jet lithog printing plate; dispersion stabilizing resin

IT Ink-jet printing

Lithographic plates

(method and oil-based ink for making ink jet-type lithog. printing plate)

IT 136998-25-9P, Divinylbenzene-octadecyl methacrylate-vinyl acetate graft copolymer 159446-39-6P 159446-42-1P 159446-45-4P, Divinylbenzene-2-mercaptoethanol-octadecyl methacrylate telomer, ester with methacrylic acid 159446-48-7P, Divinylbenzene-2-mercaptoethanol-octadecyl methacrylate telomer, ester with acrylic acid 214207-54-2P, Divinylbenzene-methyl acrylate-methyl methacrylate-octadecyl methacrylate copolymer 214708-60-8P, Ethylene glycol diacrylate-methacrylic acid chloride-octadecyl methacrylate copolymer 214772-24-4P, Divinylbenzene-2-mercaptoethanol-octadecyl methacrylate telomer, ester

with 2-carboxyethyl acrylate 214772-26-6P, Divinylbenzene-2-mercaptoethanol-octadecyl methacrylate telomer, ester with  $\alpha$ -chloroacrylic acid 214772-29-9P 214772-31-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(method and oil-based ink for making ink jet-type lithog. printing plate)

IT 214708-25-5P 214708-27-7P 214708-63-1P, Crotonic acid-divinylbenzene-tetradecyl methacrylate-styrene-vinyl acetate graft copolymer 214708-65-3P, Allyl methacrylate-methyl acrylate-methyl methacrylate-tridecyl methacrylate graft copolymer 214708-68-6P, Divinylbenzene-octadecyl methacrylate-styrene-vinyl acetate graft copolymer **214708-70-0P**, Divinylbenzene-octadecyl methacrylate-vinyl propionate-vinyl acetate graft copolymer 214708-72-2P, Divinylbenzene-octadecyl methacrylate-tetradecyl methacrylate-styrene-vinyl acetate graft copolymer **214708-74-4P**, Allyl methacrylate-dodecyl methacrylate-vinyl acetate-vinyl oleate graft copolymer 214708-76-6P, Divinylbenzene-octadecyl methacrylate-octadecyl vinyl ether-vinyl acetate graft copolymer 214708-79-9P 214708-81-3P 214708-83-5P 214708-85-7P 214708-88-0P 214708-90-4P, Divinylbenzene-methyl acrylate-methyl methacrylate-octadecyl methacrylate-tridecyloxycarbonylpropyl acrylamide graft copolymer 214708-92-6P, Divinylbenzene-methyl acrylate-methyl methacrylate-octadecyl methacrylate-octadecyl  $\alpha$ -chloroacrylate graft copolymer 214708-94-8P, Divinylbenzene-methyl acrylate-methyl methacrylate-octadecyl methacrylate-tetradecyl  $\alpha$ -cyanoacrylate graft copolymer 214708-95-9P, Divinylbenzene-ethyl acrylate-ethyl methacrylate-octadecyl methacrylate-ethyl(octyl)aminosulfonylbutyl acrylate graft copolymer 214708-96-0P, Divinylbenzene-dodecyl acrylate-ethyl methacrylate-methyl acrylate-octadecyl methacrylate-hexyloxycarbonylethenyloxycarbonyloxyethyl methacrylate graft copolymer 214708-97-1P, 2-Cyanoethyl acrylate-divinylbenzene-methyl acrylate-methyl methacrylate-octadecyl methacrylate-nonyloxycarbonylpropyloxycarbonylethyl  $\alpha$ -chloroacrylate graft copolymer **214708-98-2P**, Allyl methacrylate-styrene-tridecyl methacrylate-vinyl acetate-vinyl propionate-butoxycarbonyldecyl methacrylate graft copolymer 214708-99-3P, Acrylic acid-docosyl acrylate-ethylene glycol diacrylate-methacrylic acid-methacryloyl chloride-methyl methacrylate-octadecyl methacrylate graft copolymer 214747-75-8P 214747-80-5P 214747-82-7P 214747-83-8P 214747-84-9P 214747-85-0P 214772-35-7P, Divinylbenzene-methyl acrylate-methyl methacrylate-octadecyl methacrylate graft copolymer  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(method and oil-based ink for making ink jet-type lithog. printing plate)

IT **214708-70-0P**, Divinylbenzene-octadecyl methacrylate-vinyl propionate-vinyl acetate graft copolymer **214708-74-4P**, Allyl methacrylate-dodecyl methacrylate-vinyl acetate-vinyl oleate graft copolymer **214708-98-2P**, Allyl methacrylate-styrene-tridecyl methacrylate-vinyl acetate-vinyl propionate-butoxycarbonyldecyl methacrylate graft copolymer  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(method and oil-based ink for making ink jet-type lithog. printing plate)

RN 214708-70-0 HCAPLUS

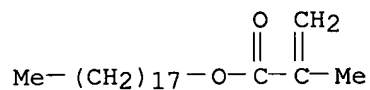
CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with diethenylbenzene, ethenyl acetate and ethenyl propanoate, graft (9CI) (CA

INDEX NAME)

CM 1

CRN 32360-05-7

CMF C22 H42 O2

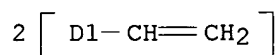


CM 2

CRN 1321-74-0

CMF C10 H10

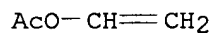
CCI IDS



CM 3

CRN 108-05-4

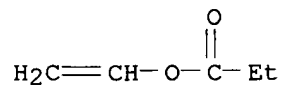
CMF C4 H6 O2



CM 4

CRN 105-38-4

CMF C5 H8 O2



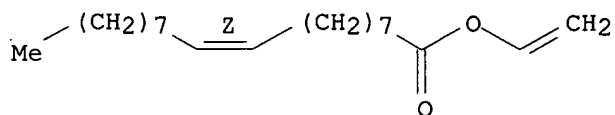
RN 214708-74-4 HCAPLUS

CN 9-Octadecenoic acid (9Z)-, ethenyl ester, polymer with dodecyl  
2-methyl-2-propenoate, ethenyl acetate and 2-propenyl 2-methyl-2-  
propenoate, graft (9CI) (CA INDEX NAME)

CM 1

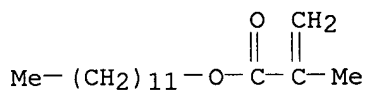
CRN 3896-58-0  
CMF C20 H36 O2

Double bond geometry as shown.



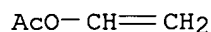
CM 2

CRN 142-90-5  
CMF C16 H30 O2



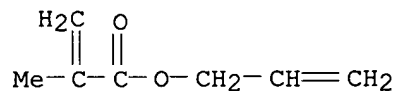
CM 3

CRN 108-05-4  
CMF C4 H6 O2



CM 4

CRN 96-05-9  
CMF C7 H10 O2

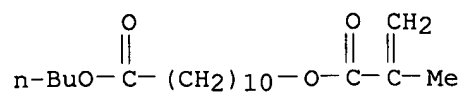


RN 214708-98-2 HCAPLUS

CN Undecanoic acid, 11-[(2-methyl-1-oxo-2-propenyl)oxy]-, butyl ester, polymer with ethenyl acetate, ethenylbenzene, ethenyl propanoate, 2-propenyl 2-methyl-2-propenoate and tridecyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

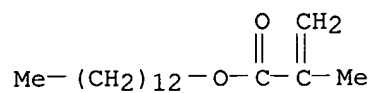
CM 1

CRN 212122-29-7  
CMF C19 H34 O4



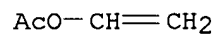
CM 2

CRN 2495-25-2  
CMF C17 H32 O2



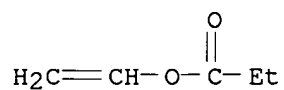
CM 3

CRN 108-05-4  
CMF C4 H6 O2



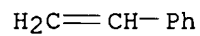
CM 4

CRN 105-38-4  
CMF C5 H8 O2



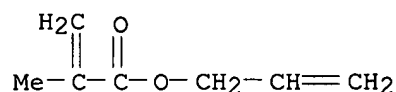
CM 5

CRN 100-42-5  
CMF C8 H8



CM 6

CRN 96-05-9  
CMF C7 H10 O2



L8 ANSWER 42 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1998:642134 HCAPLUS

DN 129:317725

TI Ink-jet photoengraving printing plate ink and manufacture of photoengraving printing plate

IN Kato, Eiichi; Osawa, Sadao; Ishii, Kazuo

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 21 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D011-00

ICS B41C001-10; B41M001-14; B41M005-00

CC 42-12 (Coatings, Inks, and Related Products)

Section cross-reference(s): 74

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10259336	A2	19980929	JP 1997-148624	19970522
	US 6143806	A	20001107	US 1998-8544	19980116
PRAI	JP 1997-19697	A	19970117		
	JP 1997-61769	A	19970228		
	JP 1997-148624	A	19970522		
	JP 1997-346469	A	19971216		

AB The oily ink, for preparation of image by ink-jet injection printing of the oily ink on a water-resistant support with hydrophilic surface, is prepared by dispersion of a polymer particle in a nonaqueous support having elec. resistivity  $\geq 10^9 \Omega\text{-cm}$  and dielec. constant  $\leq 3.5$ , wherein the polymer particle is prepared from a monofunctional vinyl compound and 0.1-15% a monomer. Thus, coating 15 g/m<sup>2</sup> (dry basis) of a mixture of gelatin, silica, colloid silica, FC 430, CH<sub>2</sub>:CHSO<sub>2</sub>CH<sub>2</sub>CONH(CH<sub>2</sub>)<sub>3</sub>NHCOCH<sub>2</sub>SO<sub>2</sub>CH<sub>2</sub>:CH<sub>2</sub> and glass beads on Metalumy 100TS (Al-plated PET film) support and drying gave a planog. plate having water contact angle 0°. Thus, an ink for the plate was prepared mainly poly(dodecyl methacrylate)-vinyl acetate-octadecyl methacrylate copolymer particles, FOC 1400 (isotetradecanol), octadecyl half maleated octadecylamide copolymer, Isopar G and a dispersion made from 95:5 dodecyl methacrylate-acrylic acid copolymer, an alkaline blue, Shellsol 71 and glass beads.

ST methacrylate copolymer oily ink planog printing; aminosulfo acrylate copolymer photoengraving printing plate; vinyl acetate copolymer ink jet printing

IT Ink-jet printing

Lithographic plates

Polymerization

Printing plates

(ink-jet photoengraving printing plate ink and manufacture of photoengraving printing plate)

IT Acrylic polymers, uses

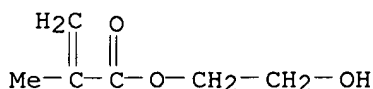
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(particles, oily ink containing; ink-jet photoengraving printing plate ink

- and manufacture of photoengraving printing plate)
- IT Aminoplasts  
Styrene-butadiene rubber, uses  
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)  
(planog. plates made from; ink-jet photoengraving printing plate ink and manufacture of photoengraving printing plate)
- IT 102327-78-6P, Crotonic acid-octadecyl methacrylate-vinyl acetate copolymer  
113783-33-8P 139357-99-6P, Dodecyl methacrylate-octadecyl methacrylate-vinyl acetate copolymer 158008-23-2P 212136-14-6P  
212839-57-1P 214625-56-6P **214625-57-7P 214625-58-8P**  
214625-59-9P 214625-60-2P 214625-61-3P 214625-62-4P 214625-63-5P  
214625-64-6P 214625-65-7P 214625-66-8P 214625-67-9P  
**214625-68-0P** 214625-69-1P  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(particles, oily ink containing; **ink-jet** photoengraving printing plate ink and manufacture of photoengraving printing plate)
- IT 9003-08-1, Sumirez 613 25036-13-9 214625-70-4 214625-71-5  
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)  
(planog. plates made from; ink-jet photoengraving printing plate ink and manufacture of photoengraving printing plate)
- IT 9003-55-8  
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)  
(styrene-butadiene rubber, planog. plates made from; ink-jet photoengraving printing plate ink and manufacture of photoengraving printing plate)
- IT 214841-12-0, Metalumy 100TS  
RL: DEV (Device component use); USES (Uses)  
(support; ink-jet photoengraving printing plate ink and manufacture of photoengraving printing plate)
- IT **214625-57-7P 214625-58-8P 214625-68-0P**  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(particles, oily ink containing; **ink-jet** photoengraving printing plate ink and manufacture of photoengraving printing plate)
- RN 214625-57-7 HCAPLUS
- CN Octadecanoic acid, ethenyl ester, polymer with dodecyl 2-methyl-2-propenoate, ethenyl acetate, 1-ethenyl-2-pyrrolidinone and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

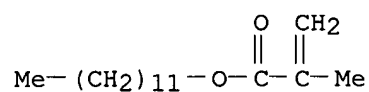
CRN 868-77-9  
CMF C6 H10 O3



CM 2

CRN 142-90-5

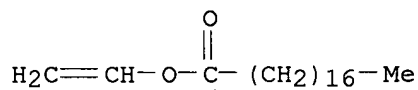
CMF C16 H30 O2



CM 3

CRN 111-63-7

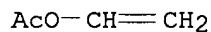
CMF C20 H38 O2



CM 4

CRN 108-05-4

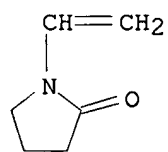
CMF C4 H6 O2



CM 5

CRN 88-12-0

CMF C6 H9 N O



RN 214625-58-8 HCAPLUS

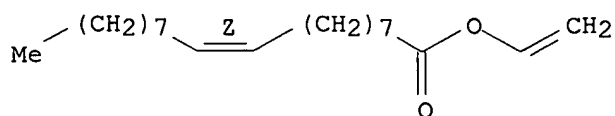
CN 9-Octadecenoic acid (9Z)-, ethenyl ester, polymer with dodecyl 2-methyl-2-propenoate and ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 3896-58-0

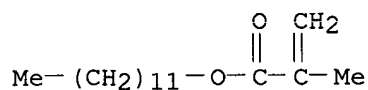
CMF C20 H36 O2

Double bond geometry as shown.



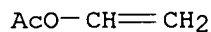
CM 2

CRN 142-90-5  
CMF C16 H30 O2



CM 3

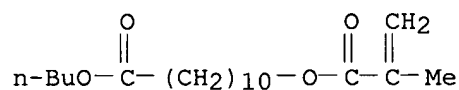
CRN 108-05-4  
CMF C4 H6 O2



RN 214625-68-0 HCAPLUS  
CN Undecanoic acid, 11-[(2-methyl-1-oxo-2-propenyl)oxy]-, butyl ester, polymer with dodecyl 2-methyl-2-propenoate, ethenyl acetate, ethenylbenzene, ethenyl propanoate and 2-propenoic acid (9CI) (CA INDEX NAME)

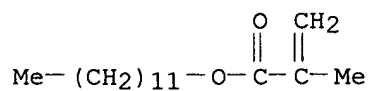
CM 1

CRN 212122-29-7  
CMF C19 H34 O4



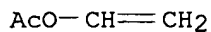
CM 2

CRN 142-90-5  
CMF C16 H30 O2



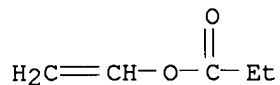
CM 3

CRN 108-05-4  
CMF C4 H6 O2



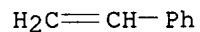
CM 4

CRN 105-38-4  
CMF C5 H8 O2



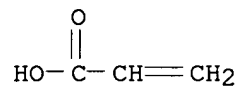
CM 5

CRN 100-42-5  
CMF C8 H8



CM 6

CRN 79-10-7  
CMF C3 H4 O2



L8 ANSWER 43 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
AN 1998:618516 HCAPLUS  
DN 129:323877  
TI Oil based ink for ink-jet lithographic printing plate making  
IN Kato, Eiichi  
PA Fuji Photo Film Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 37 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM C09D011-00  
ICS B41C001-10; B41J002-01; B41M005-00  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other

## Reprographic Processes)

Section cross-reference(s): 42

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10251580	A2	19980922	JP 1997-72642	19970310
PRAI	JP 1997-72642		19970310		

AB The ink comprises particles containing a dispersion stabilizing comb copolymer on an image-receiving layer. The copolymer is made from a weight average mol. weight  $\leq 2 \times 10^4$  macro-monomer, and which has a main chain with repeating unit  $-\text{CH}_2(\text{a}1)=\text{C}(\text{a}2)(\text{V}0-\text{D}0)-$  ( $\text{V}0 = -\text{COO}-, -\text{OCO}-, -(\text{CH}_2)\text{rCOO}-, -(\text{CH}_2)\text{rOCO}-, -\text{O}-, -\text{SO}_2-, -\text{CONHCOO}-, -\text{CONHCONH}-, -\text{COND}11-, -\text{SO}_2\text{ND}11-,$  phenylene;  $\text{D}11 = \text{H}, \text{C}1-22$  hydrocarbon;  $\text{r} = 1-4; \text{a}1-2 = \text{H}, \text{halo}, \text{cyano}, \text{hydrocarbon}, -\text{COO}-\text{D}12; \text{D}12 = \text{H}, \text{hydrocarbon}; \text{D}0 = \text{C}8-22$  hydrocarbon, etc.) and which has a polymerizable double bond group  $-\text{C}(\text{b}1)=\text{C}(\text{b}2)\text{V}1-$  ( $\text{V}1 = -\text{COO}-, -\text{CONHCOO}-, -\text{CONHCONH}-, -\text{CONH}-, \text{phenylene}; \text{b}1-2 = \text{H}, \text{halo}, \text{cyano}, \text{hydrocarbon}, -\text{COO}-\text{D}12; \text{D}12 = \text{H}, \text{hydrocarbon}; \text{D}0 = \text{C}8-22$  hydrocarbon, etc.) on the one side of the main chain, and a weight average mol. weight  $1 \times 10^3-2 \times 10^4$

macro-monomer

having polymerizable double bond groups on the one side of the main chain. The ink shows the excellent redispersion, the long shelf-life, and the excellent printing durability.

ST oil based ink lithog printing plate; dispersion lithog printing plate ink jet

IT Ink-jet printing

Lithographic plates

(based ink for ink-jet lithog. printing plate)

IT Macromonomers

RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(based ink for ink-jet lithog. printing plate)

IT Inks

(jet-printing; based ink for ink-jet lithog. printing plate)

IT 818-61-1DP, ester with a stabilizer 1074-61-9DP, ester with a stabilizer 25012-65-1DP, ester with a stabilizer 25639-21-8DP, Octadecyl methacrylate homopolymer, carboxy terminated, ester with glycidyl methacrylate 31392-16-2P 31770-04-4DP, ester with a stabilizer 44915-40-4DP, ester with a stabilizer 81524-96-1DP, ester with a stabilizer 112955-45-0P 138114-49-5DP, carboxy terminated, ester with alc. 138114-49-5P, Dodecyl methacrylate-octadecyl methacrylate graft copolymer 139104-80-6P 139104-82-8P 139104-83-9P 139104-87-3P 139105-08-1P 141348-56-3P 141349-31-7P 141349-35-1P 149433-99-8P 166019-86-9P 212135-87-0DP, carboxy-terminated 213491-64-6P 213491-65-7P 214674-44-9P, Butyl methacrylate-dodecyl methacrylate-octadecyl methacrylate graft copolymer 214674-45-0P 214674-46-1P 214674-47-2P, Dodecyl methacrylate-octadecyl acrylate-octadecyl methacrylate-styrene graft copolymer 214674-48-3P 214674-49-4DP, carboxy-terminated 214674-50-7DP, carboxy-terminated, ester of 214786-96-6P 214834-81-8P 214834-94-3P 214834-98-7P 214835-02-6P 214835-05-9P, Dodecyl methacrylate-octadecyl acrylate-thioethanol telomer, ester with 2-carboxyethyl acrylate 214835-07-1P 214835-14-0P 214835-16-2P  
RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(oil based ink for ink-jet lithog. printing plate)

IT 134436-95-6P, Dodecyl methacrylate-octadecyl methacrylate-vinyl acetate graft copolymer 214674-51-8P 214674-52-9P, Decyl crotonate-dodecyl methacrylate-methacrylic acid-octadecyl methacrylate-octadecyl

acrylate-vinyl acetate graft copolymer 214674-53-0P 214674-54-1P  
 214674-55-2P 214674-56-3P **214674-57-4P** 214674-58-5P  
**214674-59-6P** 214674-60-9P 214674-62-1P 214674-63-2P,  
 N,N-Dimethylaminoethyl acrylate-dodecyl methacrylate-methyl  
 acrylate-methyl methacrylate-octadecyl acrylate-octyl methacrylate graft  
 copolymer 214674-64-3P, 2-Carboxyethyl acrylate-dodecyl  
 methacrylate-isobutylene-methyl acrylate-methyl methacrylate-octadecyl  
 acrylate graft copolymer 214674-65-4P, Dodecyl methacrylate-isobutylene-  
 methyl acrylate-methyl methacrylate-octadecyl acrylate graft copolymer  
 214674-66-5P 214674-67-6P, Decyl crotonate-dodecyl methacrylate-ethyl  
 acrylate-glycidyl methacrylate-methyl methacrylate-octadecyl methacrylate  
 graft copolymer 214674-68-7P 214674-69-8P 214674-70-1P, Decyl  
 crotonate-dodecyl methacrylate-glycidyl acrylate-hexadecyl  
 methacrylate-methyl acrylate-methyl methacrylate-octadecyl  
 methacrylate-octadecyl acrylate graft copolymer 214674-71-2P, Ethyl  
 methacrylate-glycidyl methacrylate-methyl acrylate-octadecyl  
 methacrylate-styrene graft copolymer 214674-72-3P, Ethyl  
 methacrylate-hexadecyl methacrylate-methyl acrylate-pentyl  
 methacrylate-tridecyl acrylate graft copolymer 214674-73-4P, Glycidyl  
 methacrylate-2-cyanoethyl acrylate-decyl crotonate-octadecyl  
 methacrylate-methyl acrylate-methyl methacrylate graft copolymer  
**214674-74-5P** 214674-75-6P, Acrylic acid-2-carboxyethyl  
 acrylate-dodecyl methacrylate-glycidyl methacrylate-hexadecyl  
 methacrylate-methyl acrylate-methyl methacrylate-octadecyl acrylate graft  
 copolymer 214786-97-7P, Octadecyl methacrylate-vinyl acetate-N-vinyl  
 pyrrolidone graft copolymer

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)

(oil based ink for **ink-jet** lithog. printing plate)

IT **214674-57-4P 214674-59-6P 214674-74-5P**

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)

(oil based ink for **ink-jet** lithog. printing plate)

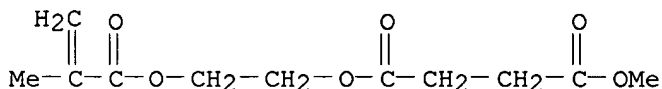
RN 214674-57-4 HCAPLUS

CN Butanedioic acid, methyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester,  
 polymer with ethenyl acetate and ethenyl propanoate, graft (9CI) (CA  
 INDEX NAME)

CM 1

CRN 135739-92-3

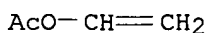
CMF C11 H16 O6



CM 2

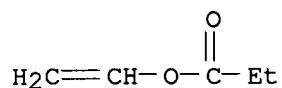
CRN 108-05-4

CMF C4 H6 O2



CM 3

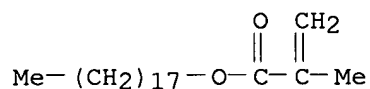
CRN 105-38-4  
CMF C5 H8 O2



RN 214674-59-6 HCAPLUS  
CN Butanoic acid, ethenyl ester, polymer with dodecyl 2-methyl-2-propenoate, ethenyl acetate, 4-ethenylphenyl acetate and octadecyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

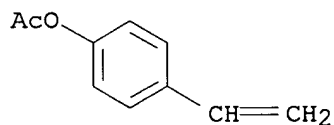
CM 1

CRN 32360-05-7  
CMF C22 H42 O2



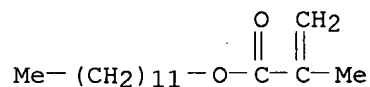
CM 2

CRN 2628-16-2  
CMF C10 H10 O2



CM 3

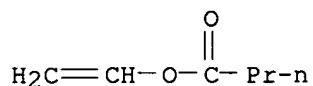
CRN 142-90-5  
CMF C16 H30 O2



CM 4

CRN 123-20-6

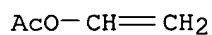
CMF C6 H10 O2



CM 5

CRN 108-05-4

CMF C4 H6 O2



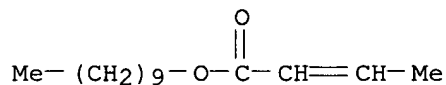
RN 214674-74-5 HCAPLUS

CN 2-Butenoic acid, decyl ester, polymer with dodecyl 2-methyl-2-propenoate, ethenyl acetate, ethenylbenzene, ethenyl propanoate, octadecyl 2-methyl-2-propenoate and oxiranylmethyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 45176-18-9

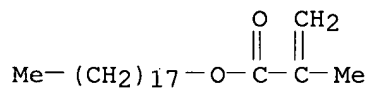
CMF C14 H26 O2



CM 2

CRN 32360-05-7

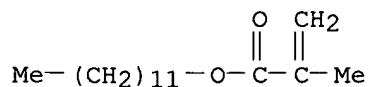
CMF C22 H42 O2



CM 3

CRN 142-90-5

CMF C16 H30 O2



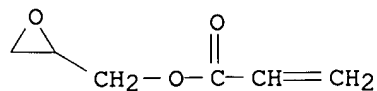
CM 4

CRN 108-05-4  
CMF C4 H6 O2



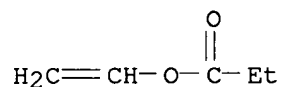
CM 5

CRN 106-90-1  
CMF C6 H8 O3



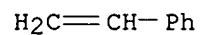
CM 6

CRN 105-38-4  
CMF C5 H8 O2



CM 7

CRN 100-42-5  
CMF C8 H8



L8 ANSWER 44 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
AN 1998:600108 HCAPLUS  
DN 129:261862  
TI Oil-based inks with excellent dispersibility, storage stability, image reproducibility, and printability for lithographic platemaking by ink jet printing  
IN Kato, Eiichi  
PA Fuji Photo Film Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 30 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese

IC ICM C09D011-00  
ICS B41C001-10; B41J002-01; B41M005-00  
CC 42-12 (Coatings, Inks, and Related Products)  
Section cross-reference(s): 74

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10245512	A2	19980914	JP 1997-61770	19970228
	US 6184267	B1	20010206	US 1998-9692	19980120
PRAI	JP 1997-19696	A	19970117		
	JP 1997-61770	A	19970228		
	JP 1997-84434	A	19970318		
	JP 1997-351562	A	19971219		

AB In image formation on a H<sub>2</sub>O-resistant substrate having lithog. printable hydrophilic surface with inks based on nonaq. solvents having elec. resistance  $\geq 109 \Omega\text{-cm}$  and dielec. constant  $\leq 3.5$  through a nozzle, the inks contain dispersed resin particles obtained by polymerization reaction of solns. containing (A) monofunctional monomers which are soluble in the solvents but insol. after polymerized, (B) macromonomers ( $M_w \leq 2 + 104$ ) obtained by adding CHb1:Cb2V1 to one end of polymers having CHa1Ca2V0D0 unit [V0 = CO<sub>2</sub>, OCO, (CH<sub>2</sub>)rCO<sub>2</sub>, (CH<sub>2</sub>)rOCO, O, SO<sub>2</sub>, CONHCO<sub>2</sub>, CONHCONH, COND11, SO2ND11, C6H<sub>4</sub>; D11 = H, C1-22 hydrocarbyl; r = 1-4; a1, a2, b1, b2 = H, halo, cyano, hydrocarbyl, CO2D12, hydrocarbyl-mediated CO2D12; D12 = H, (un)substituted hydrocarbyl; D0 = C8-22 hydrocarbon, (A1B1)m(A2B2)nD21; A1, A2 = (un)substituted C1-18 hydrocarbyl, may contain CHB3(A4B4)pD23; B1-4 = O, CO, CO<sub>2</sub>, OCO, SO<sub>2</sub>, ND22CO; D21-23 = H, C1-22 hydrocarbyl; A4 = (un)substituted C1-18 hydrocarbyl; m, n, p = 0-4; m = n = p  $\neq$  0; V1 = CO<sub>2</sub>, CONHCO<sub>2</sub>, CONHCONH, CONH, C6H<sub>4</sub>], and (C) dispersion stabilizer resins, which have CHd1Cd2X1Y1 unit (X1 = CO<sub>2</sub>, OCO, CH2OCO, CH2CO<sub>2</sub>, O, SO<sub>2</sub>; Y1 = C10-32 aliphatic group; d1, d2 = same as a1 and a2) and are partially crosslinked and soluble in the solvents. Thus, octadecyl methacrylate was polymerized in the presence of 3-mercaptopropionic acid and then the resulting telomer was esterified with glycidyl methacrylate to give a macromonomer ( $M_w 1 + 104$ ), 1.0 g of which was mixed with 12 g of a dispersion stabilizer resin (prepared from 100 g octadecyl methacrylate and 1.0 g divinylbenzene), 100 g vinyl acetate, and Isopar H, polymerized with addition of 2,2'-azobis(isovaleronitrile), heated, and sieved to give a latex with average particle size 0.20  $\mu\text{m}$ .

ST lithog platemaking ink acrylic graft polymer; dispersibility jet printing ink vinyl polymer

IT Inks  
(jet-printing; oil-based inks with good dispersibility, storage stability, image reproducibility, and printability for lithog. platemaking by ink jet printing)

IT Lithographic plates  
(oil-based inks with good dispersibility, storage stability, image reproducibility, and printability for lithog. platemaking by ink jet printing)

IT Macromonomers  
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(oil-based inks with good dispersibility, storage stability, image reproducibility, and printability for lithog. platemaking by ink jet printing)

IT 5926-95-4DP, Glutaconic anhydride, reaction products with divinylbenzene-mercaptoethylamine-octadecyl methacrylate telomer 61255-17-2P, Divinylbenzene-dodecyl methacrylate copolymer

120534-27-2P, Divinyl adipate-dodecyl methacrylate-vinyl acetate copolymer 122324-74-7P, Divinylbenzene-octadecyl methacrylate copolymer 130805-26-4P, Divinylbenzene-hexadecyl methacrylate copolymer 130805-48-0P, Docosanyl methacrylate-ISP 22GA copolymer 139720-61-9P, Divinylbenzene-2-mercaptoethyl phosphate-octadecyl methacrylate telomer 139720-62-0P 139720-64-2DP, Divinylbenzene-2-mercaptoethylamine-octadecyl methacrylate telomer, reaction products with glutaric acid anhydride 148532-67-6P, Dodecyl methacrylate-octyl methacrylate-trivinylbenzene copolymer 148532-68-7P, Butyl methacrylate-ethylene glycol dimethacrylate-octadecyl methacrylate copolymer 148532-70-1P, Octadecyl methacrylate-2-(trimethoxysilyloxy)ethyl methacrylate-vinyl methacrylate copolymer 148532-71-2P, Allyl methacrylate-tetradecyl methacrylate copolymer 148532-72-3P, Diethylene glycol dimethacrylate-methacrylic acid-octadecyl methacrylate copolymer 148532-81-4P, Divinyl adipate-hexadecyl methacrylate copolymer 213076-91-6P, Dodecyl methacrylate-trimethylolpropane methacrylate-N-vinylpyrrolidone copolymer 213548-20-0P, 2-(Dimethylamino)ethanethiol-divinylbenzene-octadecyl methacrylate telomer  
 RL: DEV (Device component use); IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(dispersion stabilizer; oil-based inks with good dispersibility, storage stability, image reproducibility, and printability for lithog. platemaking by ink jet printing)

IT 213547-33-2P 213547-35-4P 213547-37-6P  
 213547-38-7P 213547-40-1P 213547-43-4P  
 213547-46-7P 213547-50-3P 213547-53-6P  
 213547-56-9P 213547-59-2P 213547-63-8P 213547-67-2P  
 213547-70-7P 213547-74-1P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(macromer; oil-based inks with good dispersibility, storage stability, image reproducibility, and printability for lithog. platemaking by ink jet printing)

IT 132176-90-0P, Octadecyl methacrylate-vinyl acetate graft copolymer 132176-92-2P, Dodecyl methacrylate-vinyl acetate graft copolymer 138113-93-6P 138114-29-1P, Ethyl 3-methyl-3-butenyl butanedioate-vinyl acetate graft copolymer 138114-31-5P, Methyl 3-methyl-3-butenyl pentanedioate-vinyl acetate graft copolymer 138114-33-7P, 3-Butenyl pentyl 2-butenedioate-vinyl acetate graft copolymer 138114-44-0P 139720-84-6P 141288-13-3P, Tridecyl methacrylate-vinyl acetate graft copolymer 141288-18-8P, Hexadecyl methacrylate-vinyl acetate graft copolymer 147046-12-6P 163035-17-4P, Hexadecyl methacrylate-methyl acrylate-methyl methacrylate graft copolymer 163180-65-2P, Octadecyl acrylate-vinyl acetate graft copolymer 213547-91-2P, Ethyl methacrylate-methyl acrylate-tetradecyl methacrylate graft copolymer 213547-94-5P, Eicosyl methacrylate-ethyl acrylate-methyl methacrylate graft copolymer 213547-99-0P, Dodecyl methacrylate-methyl acrylate-methyl methacrylate-octadecyl acrylate graft copolymer 213548-04-0P 213548-07-3P 213548-09-5P, Dodecyl methacrylate-ethyl methacrylate-methyl acrylate-octadecyl acrylate graft copolymer 213548-12-0P, 2-Cyanoethyl acrylate-dodecyl methacrylate-methyl acrylate-methyl methacrylate-octadecyl acrylate graft copolymer 213548-26-6P, Methyl acrylate-methyl methacrylate-tetradecyl methacrylate graft copolymer

RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(oil-based inks with good dispersibility, storage stability, image

reproducibility, and printability for lithog. platemaking by  
ink jet printing)

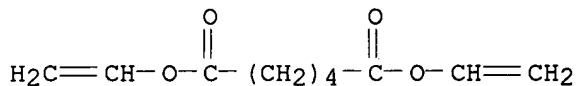
IT 120534-27-2P, Divinyl adipate-dodecyl methacrylate-vinyl acetate  
copolymer 148532-70-1P, Octadecyl methacrylate-2-  
(trimethoxysilyloxy)ethyl methacrylate-vinyl methacrylate copolymer  
148532-81-4P, Divinyl adipate-hexadecyl methacrylate copolymer  
RL: DEV (Device component use); IMF (Industrial manufacture); MOA  
(Modifier or additive use); PREP (Preparation); USES (Uses)  
(dispersion stabilizer; oil-based inks with good dispersibility,  
storage stability, image reproducibility, and printability for lithog.  
platemaking by ink jet printing)

RN 120534-27-2 HCAPLUS

CN Hexanedioic acid, diethenyl ester, polymer with dodecyl  
2-methyl-2-propenoate and ethenyl acetate (9CI) (CA INDEX NAME)

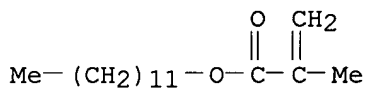
CM 1

CRN 4074-90-2  
CMF C10 H14 O4



CM 2

CRN 142-90-5  
CMF C16 H30 O2



CM 3

CRN 108-05-4  
CMF C4 H6 O2

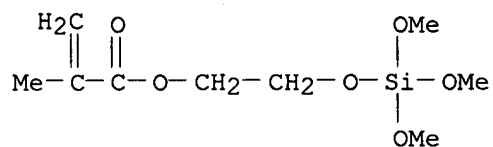


RN 148532-70-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, ethenyl ester, polymer with octadecyl  
2-methyl-2-propenoate and 2-[(trimethoxysilyl)oxy]ethyl  
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

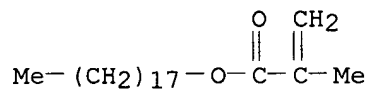
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CMF C9 H18 O6 Si



CM 2

CRN 32360-05-7

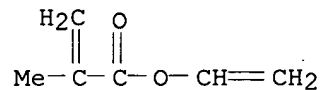
CMF C22 H42 O2



CM 3

CRN 4245-37-8

CMF C6 H8 O2



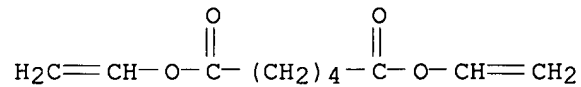
RN 148532-81-4 HCAPLUS

CN Hexanedioic acid, diethenyl ester, polymer with hexadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 4074-90-2

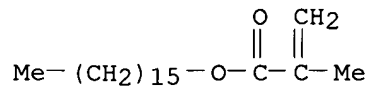
CMF C10 H14 O4



CM 2

CRN 2495-27-4

CMF C20 H38 O2



IT 213547-33-2P 213547-35-4P 213547-37-6P  
 213547-38-7P 213547-40-1P 213547-43-4P  
 213547-46-7P 213547-50-3P 213547-53-6P  
 213547-56-9P 213547-59-2P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT  
 (Reactant or reagent)

(macromer; oil-based inks with good dispersibility, storage stability,  
 image reproducibility, and printability for lithog. platemaking by  
**ink jet** printing)

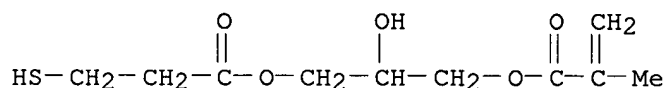
RN 213547-33-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl  
 ester, telomer with octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0

CMF C10 H16 O5 S



CM 2

CRN 25639-21-8

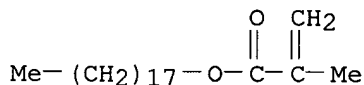
CMF (C22 H42 O2) x

CCI PMS

CM 3

CRN 32360-05-7

CMF C22 H42 O2



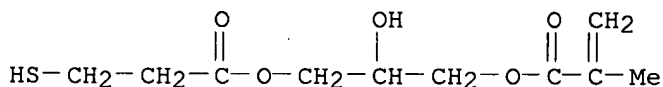
RN 213547-35-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, telomer with  
 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate (9CI)  
 (CA INDEX NAME)

CM 1

CRN 125571-36-0

CMF C10 H16 O5 S

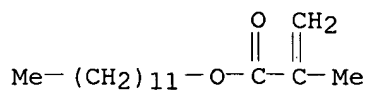


CM 2

CRN 25719-52-2  
CMF (C16 H30 O2) x  
CCI PMS

CM 3

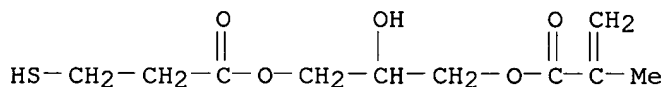
CRN 142-90-5  
CMF C16 H30 O2



RN 213547-37-6 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl ester, telomer with tridecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0  
CMF C10 H16 O5 S

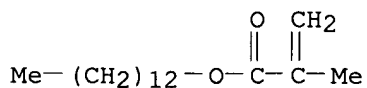


CM 2

CRN 41630-11-9  
CMF (C17 H32 O2) x  
CCI PMS

CM 3

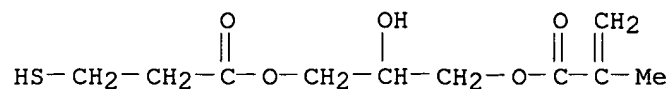
CRN 2495-25-2  
CMF C17 H32 O2



RN 213547-38-7 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, hexadecyl ester, telomer with 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0  
CMF C10 H16 O5 S

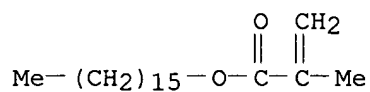


CM 2

CRN 25986-80-5  
CMF (C20 H38 O2) x  
CCI PMS

CM 3

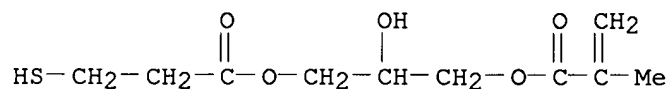
CRN 2495-27-4  
CMF C20 H38 O2



RN 213547-40-1 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl ester, telomer with octadecyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0  
CMF C10 H16 O5 S

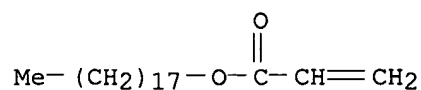


CM 2

CRN 25986-77-0  
CMF (C21 H40 O2) x  
CCI PMS

CM 3

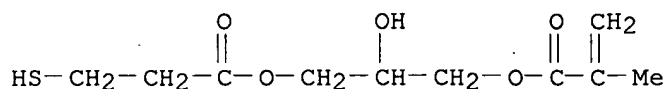
CRN 4813-57-4  
CMF C21 H40 O2



RN 213547-43-4 HCAPLUS  
 CN Butanedioic acid, ethyl 3-methyl-3-butenyl ester, telomer with  
 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate (9CI)  
 (CA INDEX NAME)

CM 1

CRN 125571-36-0  
 CMF C10 H16 O5 S

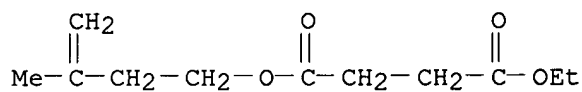


CM 2

CRN 138114-97-3  
 CMF (C11 H18 O4) x  
 CCI PMS

CM 3

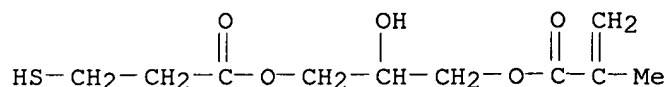
CRN 138114-28-0  
 CMF C11 H18 O4



RN 213547-46-7 HCAPLUS  
 CN Pentanedioic acid, methyl 3-methyl-3-butenyl ester, telomer with  
 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0  
 CMF C10 H16 O5 S

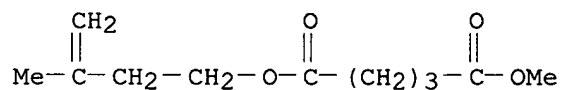


CM 2

CRN 138114-98-4  
CMF (C11 H18 O4) x  
CCI PMS

CM 3

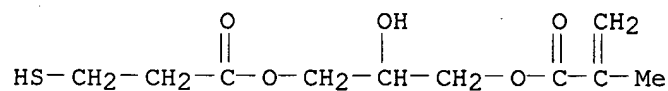
CRN 138114-30-4  
CMF C11 H18 O4



RN 213547-50-3 HCAPLUS  
CN 2-Butenedioic acid, 3-butenyl pentyl ester, telomer with  
2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate (9CI)  
(CA INDEX NAME)

CM 1

CRN 125571-36-0  
CMF C10 H16 O5 S

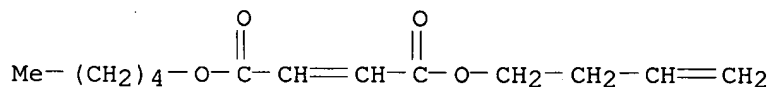


CM 2

CRN 138114-99-5  
CMF (C13 H20 O4) x  
CCI PMS

CM 3

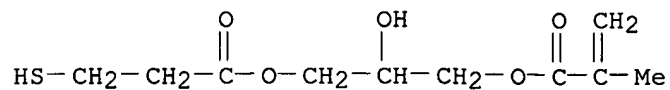
CRN 138114-32-6  
CMF C13 H20 O4



RN 213547-53-6 HCAPLUS  
CN Heptanoic acid, 1-(2-propenyl)-1,2-ethanediyl ester, telomer with  
2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate (9CI)  
(CA INDEX NAME)

CM 1

CRN 125571-36-0  
CMF C10 H16 O5 S

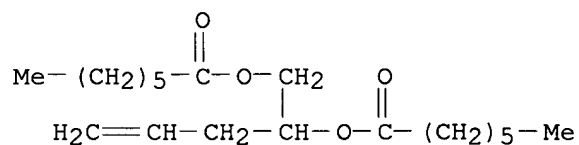


CM 2

CRN 138114-76-8  
CMF (C19 H34 O4) x  
CCI PMS

CM 3

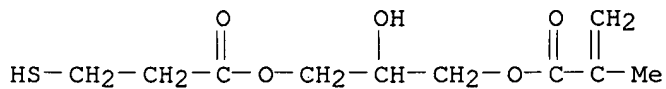
CRN 138114-75-7  
CMF C19 H34 O4



RN 213547-56-9 HCAPLUS  
CN Hexanoic acid, 2-(acetyloxy)-4-methyl-4-pentenyl ester, telomer with  
2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl 2-methyl-2-propenoate (9CI)  
(CA INDEX NAME)

CM 1

CRN 125571-36-0  
CMF C10 H16 O5 S

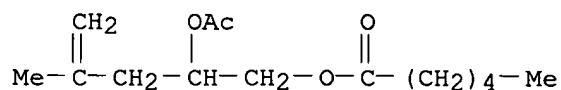


CM 2

CRN 138114-77-9  
CMF (C14 H24 O4) x  
CCI PMS

CM 3

CRN 138114-43-9  
CMF C14 H24 O4



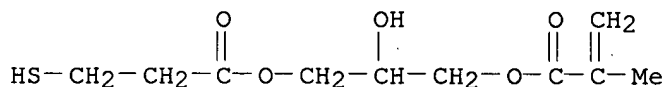
RN 213547-59-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-3-(3-mercapto-1-oxopropoxy)propyl ester, telomer with 3-butenyl 3-(octylsulfonyl)propanoate (9CI) (CA INDEX NAME)

CM 1

CRN 125571-36-0

CMF C10 H16 O5 S



CM 2

CRN 138114-83-7

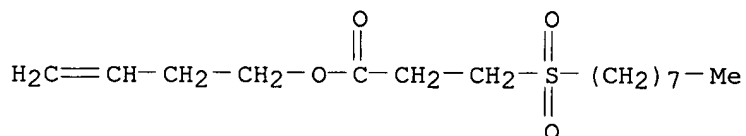
CMF (C15 H28 O4 S)x

CCI PMS

CM 3

CRN 138113-92-5

CMF C15 H28 O4 S



IT 213548-07-3P

RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(oil-based inks with good dispersibility, storage stability, image reproducibility, and printability for lithog. platemaking by **ink jet** printing)

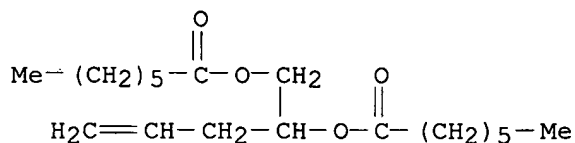
RN 213548-07-3 HCAPLUS

CN Heptanoic acid, 1-(2-propenyl)-1,2-ethanediyl ester, polymer with 2-butenic acid, ethenyl acetate and ethenyl propanoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 138114-75-7

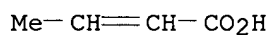
CMF C19 H34 O4



CM 2

CRN 3724-65-0

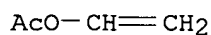
CMF C4 H6 O2



CM 3

CRN 108-05-4

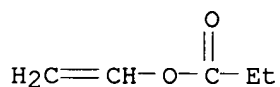
CMF C4 H6 O2



CM 4

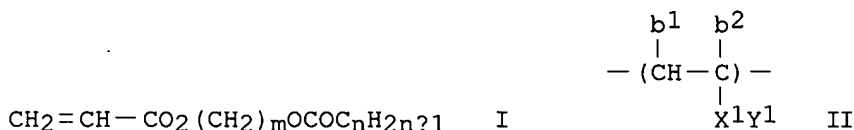
CRN 105-38-4

CMF C5 H8 O2



L8 ANSWER 45 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 1998:535246 HCAPLUS  
 DN 129:252505  
 TI Oil based ink for ink-jet lithographic printing plate making  
 IN Kato, Eiichi; Osawa, Sadao; Ishii, Kazuo  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 30 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D011-00  
 ICS B41C001-10; B41M005-00  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other  
 Reprographic Processes)  
 Section cross-reference(s): 42  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10219164	A2	19980818	JP 1997-41665	19970210
PRAI	JP 1997-41665		19970210		
GI					



AB In the oil based ink made from resin particles dispersed in non-aqueous solvent, the resin particle is prepared from polymerization of a monomer which is soluble in non-aqueous solvent and which becomes insol. in the solvent after polymerization, monomer I (m = 2-10; n = 4-18) which co-polymerize with the above monomer, partially cross-linked polymer II (X1 = -COO-; Y1 = C6-32 aliphatic; b1-2 = H), a dispersion stabilizing resin. The ink shows the excellent re-dispersion, long shelf-life, durability.

ST oil based ink lithog printing plate

IT Inks  
(jet-printing; oil based ink for ink-jet lithog. printing plate making)

IT Inks  
(lithog.; oil based ink for ink-jet lithog. printing plate making)

IT Ink-jet printing  
Lithographic plates  
(oil based ink for ink-jet lithog. printing plate making)

IT 36497-24-2P, Hexadecyl methacrylate-vinylbenzene copolymer 55348-35-1P, Divinylbenzene-dodecyl methacrylate-styrene copolymer 55778-35-3P, Octadecyl methacrylate-vinyl acetate copolymer 61255-17-2P, Divinyl benzene-dodecyl methacrylate copolymer 68993-80-6P, Alkali blue 93059-20-2P, FOC 1400 **120534-27-2P**, Divinyl adipate-dodecyl methacrylate-vinyl acetate copolymer 122324-74-7P, Divinyl benzene-octadecyl methacrylate copolymer 130805-21-9P, Divinyl benzene-tridecyl methacrylate copolymer 130805-26-4P, Divinyl benzene-hexadecyl methacrylate copolymer 130805-48-0P, Docosyl methacrylate-ISP 22GA copolymer 139720-57-3P, Divinylbenzene-octadecyl methacrylate copolymer telomer with 3-mercaptopropionic acid 139720-59-5P 139720-61-9P, Divinylbenzene-octadecyl methacrylate copolymer telomer with 2-mercaptoethylphosphoric acid 139720-62-0P 139720-63-1P, Divinylbenzene-octadecyl methacrylate copolymer telomer with 3-mercaptoethylaminopropionic acid 139740-30-0P, Divinylbenzene-octadecyl methacrylate-thiomalic acid copolymer 148532-67-6P, Dodecyl methacrylate-octyl methacrylate-trivinylbenzene copolymer 148532-68-7P, Butyl methacrylate-ethylene glycol dimethacrylate-octadecyl methacrylate copolymer **148532-70-1P**, Vinyl methacrylate-octadecyl methacrylate-2-(trimethoxysilyloxy)ethyl methacrylate copolymer 148532-71-2P, Allyl methacrylate-tetradecyl methacrylate copolymer 148532-72-3P, Diethyleneglycol dimethacrylate-methacrylic acid-octadecyl methacrylate copolymer **148532-81-4P**, Divinyl adipate-hexadecyl methacrylate copolymer 148575-86-4P, Polyethylene glycol diacrylate-tetradecyl methacrylate copolymer 159133-93-4P, 2-Hydroxyethyl methacrylate-octadecyl methacrylate-triethyleneglycol

dimethacrylate copolymer 159291-21-1P, Dodecyl methacrylate-N,N-dimethylaminoethyl methacrylate-ethylene glycol dimethacrylate copolymer 159291-23-3P, Octadecyl methacrylate-triethylene glycol diacrylate-2-(trimethoxysilyloxy)ethyl methacrylate copolymer 161641-25-4P, Methyl acrylate-methyl methacrylate-octadecyl acrylate copolymer 212839-49-1P, N,N-Dimethylaminoethyl methacrylate-ethyl methacrylate-ethylene glycol methacrylate-dodecyl methacrylate copolymer **212839-52-6P**, Octadecyl acrylate-vinyl oleate copolymer 212839-53-7P, Octadecyl acrylate-octadecyl vinyl ether copolymer 212839-54-8P, Hexadecyl methacrylate-octadecyl acrylate copolymer 212839-55-9P 212839-56-0P 212839-58-2P 212839-59-3P 212839-61-7P 212839-63-9P 212839-64-0P, Eicosyl methacrylate-octadecyl acrylate copolymer 212839-66-2P, Methyl acrylate-methyl methacrylate-octadecyl  $\alpha$ -chloroacrylate copolymer 212839-68-4P, Methyl acrylate-methyl methacrylate-tetradecyl  $\alpha$ -cyanoacrylate copolymer 212839-69-5P 212839-70-8P, Ethyl acrylate-ethyl methacrylate-monomer C copolymer 212839-71-9P, Dodecyl acrylate-methyl acrylate-ethyl methacrylate-monomer C copolymer 212839-72-0P, 2-Cyanoethyl acrylate-methyl acrylate-methyl methacrylate-monomer C copolymer **212839-73-1P**, Vinyl propionate-styrene-vinyl acetate-butoxycarbonyldodecyl methacrylate copolymer 212839-74-2P, Acrylic acid-docosyl acrylate-methyl methacrylate-methyl acrylate copolymer 213076-91-6P, N-Vinyl-2-pyrrolidone-dodecyl methacrylate-trimethylolpropane methacrylate copolymer 213263-27-5P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(oil based ink for **ink-jet** lithog. printing plate making)

IT **120534-27-2P**, Divinyl adipate-dodecyl methacrylate-vinyl acetate copolymer **148532-70-1P**, Vinyl methacrylate-octadecyl methacrylate-2-(trimethoxysilyloxy)ethyl methacrylate copolymer **148532-81-4P**, Divinyl adipate-hexadecyl methacrylate copolymer **212839-52-6P**, Octadecyl acrylate-vinyl oleate copolymer **212839-73-1P**, Vinyl propionate-styrene-vinyl acetate-butoxycarbonyldodecyl methacrylate copolymer

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(oil based ink for **ink-jet** lithog. printing plate making)

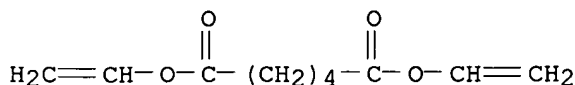
RN 120534-27-2 HCAPLUS

CN Hexanedioic acid, diethenyl ester, polymer with dodecyl 2-methyl-2-propenoate and ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 4074-90-2

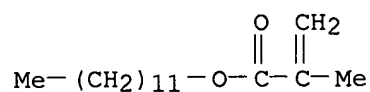
CMF C10 H14 O4



CM 2

CRN 142-90-5

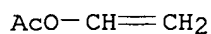
CMF C16 H30 O2



CM 3

CRN 108-05-4

CMF C4 H6 O2



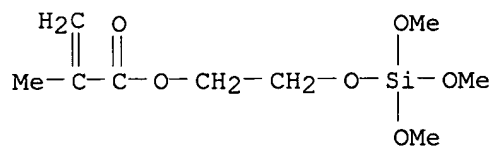
RN 148532-70-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, ethenyl ester, polymer with octadecyl  
2-methyl-2-propenoate and 2-[(trimethoxysilyl)oxy]ethyl  
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 120358-73-8

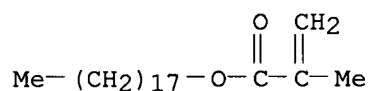
CMF C9 H18 O6 Si



CM 2

CRN 32360-05-7

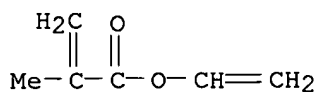
CMF C22 H42 O2



CM 3

CRN 4245-37-8

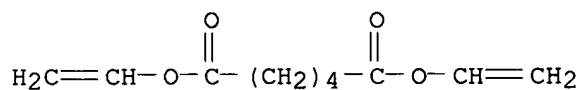
CMF C6 H8 O2



RN 148532-81-4 HCAPLUS  
 CN Hexanedioic acid, diethenyl ester, polymer with hexadecyl  
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

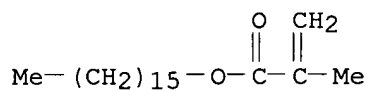
CM 1

CRN 4074-90-2  
 CMF C10 H14 O4



CM 2

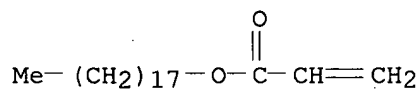
CRN 2495-27-4  
 CMF C20 H38 O2



RN 212839-52-6 HCAPLUS  
 CN 9-Octadecenoic acid (9Z)-, ethenyl ester, polymer with octadecyl  
 2-propenoate (9CI) (CA INDEX NAME)

CM 1

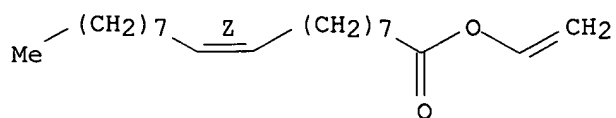
CRN 4813-57-4  
 CMF C21 H40 O2



CM 2

CRN 3896-58-0  
 CMF C20 H36 O2

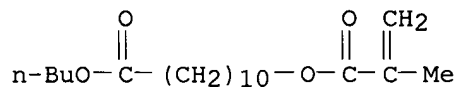
Double bond geometry as shown.



RN 212839-73-1 HCAPLUS  
 CN Undecanoic acid, 11-[(2-methyl-1-oxo-2-propenyl)oxy]-, butyl ester,  
 polymer with ethenyl acetate, ethenylbenzene and ethenyl propanoate (9CI)  
 (CA INDEX NAME)

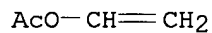
CM 1

CRN 212122-29-7  
 CMF C19 H34 O4



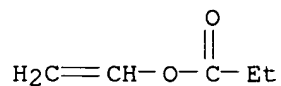
CM 2

CRN 108-05-4  
 CMF C4 H6 O2



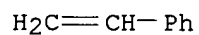
CM 3

CRN 105-38-4  
 CMF C5 H8 O2



CM 4

CRN 100-42-5  
 CMF C8 H8



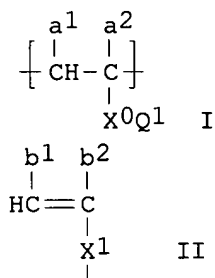
L8 ANSWER 46 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 1998:535245 HCAPLUS

KATHLEEN FULLER EIC 1700/PARKER LAW 308-4290

DN 129:267923  
 TI Oil-based ink for ink-jet type lithographic printing plate  
 IN Kato, Eiichi  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 28 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D011-00  
 ICS B41C001-10; B41M005-00; C08F290-00; C09D155-00  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 Section cross-reference(s): 42

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10219163	A2	19980818	JP 1997-41664	19970210
PRAI	JP 1997-41664		19970210		
GI					



AB In the oil-based ink for ink-jet type lithog. printing plate made from dispersed resin particles in a non-aqueous carrier solution, a dispersion stabilizer resin consists of polymer I, which is a macro-monomer and which has a group having a monofunctional group at the end of the main chain of I via polymerizable double bond group II. The resin particles are made from a monofunctionalized monomer which is soluble in a non-aqueous solvent and becomes insol. after co-polymerization. The ink shows the excellent recording-dispersion characteristics, the long shelf-life, and the excellent printing-durability.

ST ink lithog printing plate

IT Inks

(lithog.; oil-based ink for ink-jet type lithog. printing plate)

IT Latex

(oil-based ink for ink-jet type lithog. printing plate)

IT 25986-77-0DP, Octadecyl acrylate homopolymer, carboxy terminated, ester with glycidyl methacrylate 139105-08-1P 213491-57-7P 213491-58-8P 213491-60-2P 213491-61-3P 213491-62-4P, Dodecyl methacrylate-octadecyl acrylate-thioethanol copolymer 2-carboxyethylmethacrylate 213491-63-5P 213491-64-6P 213491-65-7P 213491-66-8P

RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(oil-based ink for ink-jet type lithog. printing plate)

IT 25213-29-0P, Styrene-vinyl acetate copolymer 25609-89-6P, Crotonic

acid-vinyl acetate copolymer **26715-83-3P**, Vinyl acetate-vinyl propionate copolymer 161641-25-4P, Methyl acrylate-methyl methacrylate-octadecyl acrylate copolymer 169329-20-8P 212839-66-2P, Methyl acrylate-methyl methacrylate-octadecyl chloroacrylate copolymer 212839-68-4P 212839-69-5P 212839-71-9P 212839-72-0P **212839-73-1P** 212839-74-2P, Acrylic acid-docosanyl acrylate-methyl acrylate-methyl methacrylate copolymer 213263-15-1P 213263-16-2P 213263-17-3P 213263-18-4P 213263-19-5P 213263-20-8P 213263-21-9P 213263-22-0P 213263-23-1P 213263-27-5P 213263-32-2P 213263-34-4P, Acrylic acid-AA-6-ethylene glycol dimethacrylate-methyl 3-mercaptopropionate copolymer

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(oil-based ink for **ink-jet** type lithog. printing plate)

IT **26715-83-3P**, Vinyl acetate-vinyl propionate copolymer

**212839-73-1P**

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(oil-based ink for **ink-jet** type lithog. printing plate)

RN 26715-83-3 HCAPLUS

CN Propanoic acid, ethenyl ester, polymer with ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 108-05-4

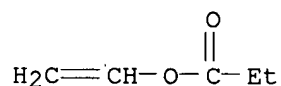
CMF C4 H6 O2

AcO-CH=CH<sub>2</sub>

CM 2

CRN 105-38-4

CMF C5 H8 O2



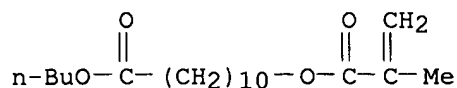
RN 212839-73-1 HCAPLUS

CN Undecanoic acid, 11-[(2-methyl-1-oxo-2-propenyl)oxy]-, butyl ester, polymer with ethenyl acetate, ethenylbenzene and ethenyl propanoate (9CI) (CA INDEX NAME)

CM 1

CRN 212122-29-7

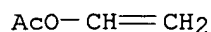
CMF C19 H34 O4



CM 2

CRN 108-05-4

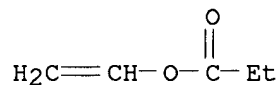
CMF C4 H6 O2



CM 3

CRN 105-38-4

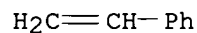
CMF C5 H8 O2



CM 4

CRN 100-42-5

CMF C8 H8



L8 ANSWER 47 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 1998:501091 HCAPLUS  
 DN 129:209383  
 TI Ink-jet recording sheets and manufacture thereof, providing highly water-resistant images  
 IN Sakata, Kanji; Kanawa, Kazuhiko; Fukuda, Kenji  
 PA Tokuyama K. K., Japan  
 SO Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM B41M005-00  
 ICS D21H027-00  
 CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10203005	A2	19980804	JP 1997-9424	19970122

PRAI JP 1997-9424

19970122

AB The title sheets have an ink recording layer from 100 parts water-soluble polymers 100 and 3.0-65 parts crosslinked vinyl polymers having ammonium groups.

ST ink jet recording sheet coating; ammonium vinyl polymer ink jet recording

IT Ink-jet printing

(ink-jet recording sheets and manufacture thereof, providing highly water-resistant images)

IT 26062-79-3P, Diallyldimethylammonium chloride polymer 211995-23-2P

211995-24-3P 211995-25-4P **211995-26-5P 211995-27-6P**

211995-28-7P 211995-29-8P **211995-30-1P** 212138-12-0P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(ink-jet recording sheets and manufacture thereof, providing highly water-resistant images)

IT **211995-26-5P 211995-27-6P 211995-30-1P**

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(ink-jet recording sheets and manufacture thereof, providing highly water-resistant images)

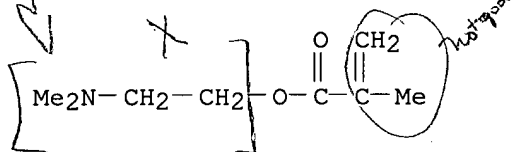
RN **211995-26-5** HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, hydrochloride, polymer with 2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2421-44-5

CMF C8 H15 N O2 . Cl H

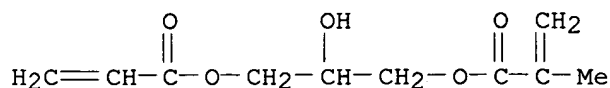


● HCl

CM 2

CRN 1709-71-3

CMF C10 H14 O5



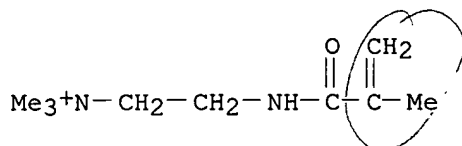
RN 211995-27-6 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)amino]-, chloride, polymer with 2-(hydroxymethyl)-2-[[2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 69174-85-2

CMF C9 H19 N2 O . Cl

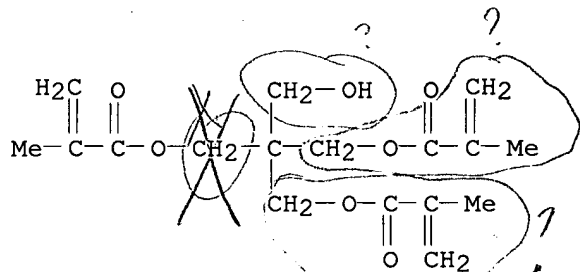


● Cl<sup>-</sup>

CM 2

CRN 3524-66-1

CMF C17 H24 O7



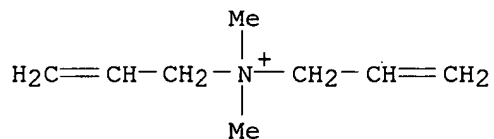
RN 211995-30-1 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-(hydroxymethyl)-2-[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

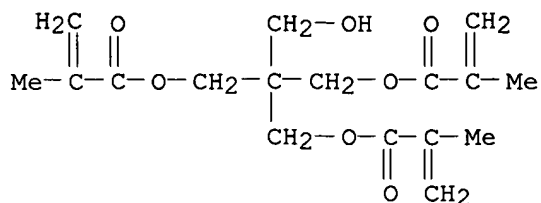


● Cl<sup>-</sup>

CM 2

CRN 3524-66-1

CMF C17 H24 O7



L8 ANSWER 48 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1998:498109 HCAPLUS

DN 129:223262

TI Oil-based inks with excellent redispersibility and storability, used for ink jet process for making printing plates with excellent printing durability

IN Kato, Eiichi; Osawa, Sadao; Ishii, Kazuo

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 25 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D011-00

ICS B41C001-10; B41M005-00; C08L033-14; C09D155-00; C08F290-06

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10204356	A2	19980804	JP 1997-21017	19970120
PRAI	JP 1997-21017		19970120		

AB The title inks contain dispersed resin particles obtained by polymerizing a solution containing monofunctional monomer(s) (soluble in polymerization medium and forming

polymers insol. in the medium) in the presence of a dispersion stabilizing resin colloidal dispersion containing monofunctional monomers and macromers of CH(a1):C(a2)(X0Q1) as main component and CH(a1):C(a2)X1- end group in a nonaq. solvent, wherein X0 = CO2, O2C, CH2O2C, CH2CO2, O, SO2, CO, CONR11, SO2NR11, phenylene; R11 = H, hydrocarbyl; Q1 = C10-22 alkyl, alkenyl; a1, a2 H, halogen, cyano, hydrocarbyl, CO2Z1; Z1 = H, hydrocarbyl.

ST printing plate jet ink polymer particle

IT Polymers, preparation

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(block; oil-based inks with excellent redispersibility and storability, used for ink jet process for making printing plates with excellent printing durability)

IT Polymers, preparation

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(graft; oil-based inks with excellent redispersibility and storability, used for ink jet process for making printing plates with excellent printing durability)

IT Inks

(jet-printing; oil-based inks with excellent redispersibility and storability, used for ink jet process for making printing plates with

- excellent printing durability)
- IT Lithographic plates  
(offset; oil-based inks with excellent redispersibility and storability, used for ink jet process for making printing plates with excellent printing durability)
- IT 126639-06-3P, Stearyl methacrylate-styrene block copolymer 139406-18-1P, Stearyl methacrylate-vinyl acetate block copolymer 150408-47-2P, Methyl methacrylate-stearyl methacrylate block copolymer 156682-80-3P, Methyl acrylate-methyl methacrylate-stearyl methacrylate copolymer 212122-06-0P, Ethyl methacrylate-methacrylic acid-stearyl methacrylate copolymer 212122-07-1P, Lauryl methacrylate-methyl vinyl ether-stearyl methacrylate-vinyl acetate copolymer 212122-08-2P, Lauryl methacrylate-stearyl methacrylate-styrene-vinyltoluene copolymer 212122-09-3P, Lauryl methacrylate-stearyl methacrylate-ethyl acrylate-ethyl methacrylate-methyl acrylate-methyl methacrylate graft copolymer 212122-10-6P, Lauryl methacrylate-stearyl methacrylate-styrene copolymer 212122-11-7P, Lauryl methacrylate-stearyl methacrylate-vinyl acetate-N-vinylpyrrolidone copolymer 212122-17-3P, Ethyl acrylate-methyl methacrylate-stearyl methacrylate-styrene-tridecyl 4-acrylamidobutyrate block graft copolymer 212122-18-4P, Methyl acrylate-methyl methacrylate-octadecyl  $\alpha$ -chloroacrylate-stearyl methacrylate block graft copolymer 212122-21-9P 212122-23-1P, Methyl acrylate-methyl methacrylate-stearyl methacrylate-styrene-(monomer on p.21) block graft copolymer 212122-25-3P, Ethyl methacrylate-methyl acrylate-methacrylic acid-stearyl methacrylate-(monomer on p.21) graft copolymer 212122-26-4P, Dodecyl acrylate-ethyl methacrylate-methyl acrylate-methacrylic acid-stearyl methacrylate-(monomer on p.21) graft copolymer 212122-28-6P, 2-Cyanoethyl acrylate-methyl acrylate-methyl methacrylate-stearyl methacrylate-(monomer on p.21) graft block copolymer **212122-30-0P**, Stearyl methacrylate-styrene-vinyl acetate-vinyl propionate-(monomer on p.21) graft block copolymer 212122-31-1P, Acrylic acid-docosanyl acrylate-lauryl methacrylate-methyl acrylate-methyl methacrylate-methyl vinyl ether-stearyl methacrylate-vinyl acetate graft copolymer
- RL: IMF (Industrial manufacture); NUU (Other use, unclassified); PREP (Preparation); USES (Uses)  
(oil-based inks with excellent redispersibility and storability, used for **ink jet** process for making printing plates with excellent printing durability)
- IT 212122-12-8P, Methyl acrylate-methyl methacrylate-stearyl methacrylate-styrene block graft copolymer 212122-13-9P, Stearyl methacrylate-styrene-vinyl acetate block graft copolymer **212122-14-0P**, Lauryl methacrylate-stearyl methacrylate-vinyl acetate-vinyl propionate-N-vinylpyrrolidone graft copolymer 212122-15-1P, Methyl methacrylate-methyl acrylate-stearyl acrylate-lauryl methacrylate-methyl vinyl ether-stearyl methacrylate-vinyl acetate graft copolymer 212271-16-4P, Crotonic acid-stearyl methacrylate-vinyl acetate block graft copolymer
- RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(oil-based inks with excellent redispersibility and storability, used for **ink jet** process for making printing plates with excellent printing durability)
- IT **212122-30-0P**, Stearyl methacrylate-styrene-vinyl acetate-vinyl propionate-(monomer on p.21) graft block copolymer
- RL: IMF (Industrial manufacture); NUU (Other use, unclassified); PREP (Preparation); USES (Uses)  
(oil-based inks with excellent redispersibility and storability, used

for ink jet process for making printing plates with  
excellent printing durability)

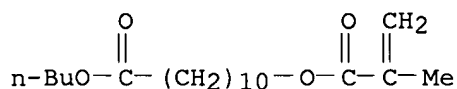
RN 212122-30-0 HCAPLUS

CN Undecanoic acid, 11-[(2-methyl-1-oxo-2-propenyl)oxy]-, butyl ester,  
polymer with ethenyl acetate, ethenylbenzene, ethenyl propanoate and  
octadecyl 2-methyl-2-propenoate, block, graft (9CI) (CA INDEX NAME)

CM 1

CRN 212122-29-7

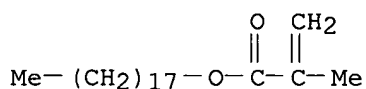
CMF C19 H34 O4



CM 2

CRN 32360-05-7

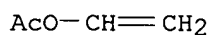
CMF C22 H42 O2



CM 3

CRN 108-05-4

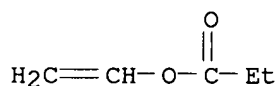
CMF C4 H6 O2



CM 4

CRN 105-38-4

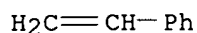
CMF C5 H8 O2



CM 5

CRN 100-42-5

CMF C8 H8



IT 212122-14-0P, Lauryl methacrylate-stearyl methacrylate-vinyl acetate-vinyl propionate-N-vinylpyrrolidone graft copolymer  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (oil-based inks with excellent redispersibility and storability, used for ink jet process for making printing plates with excellent printing durability)

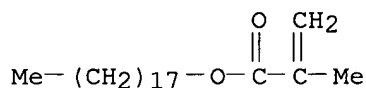
RN 212122-14-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with ethenyl acetate, ethenyl propanoate, 1-ethenyl-2-pyrrolidinone and octadecyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 32360-05-7

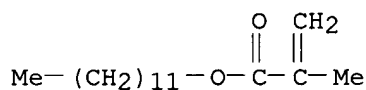
CMF C22 H42 O2



CM 2

CRN 142-90-5

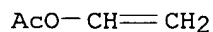
CMF C16 H30 O2



CM 3

CRN 108-05-4

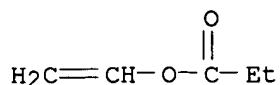
CMF C4 H6 O2



CM 4

CRN 105-38-4

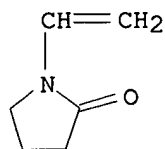
CMF C5 H8 O2



CM 5

CRN 88-12-0

CMF C6 H9 N O



L8 ANSWER 49 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1998:498107 HCAPLUS

DN 129:209345

TI Oil-based inks with excellent redispersibility and storability, used for ink jet process for making printing plates with excellent printing durability

IN Kato, Eiichi; Osawa, Sadao; Ishii, Kazuo

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 31 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D011-00

ICS B41M005-00; C09D155-00; C08F290-06

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	JP 10204354	A2	19980804	JP 1997-21011	19970120
PRAI	JP 1997-21011		19970120		

AB The title inks contain dispersed resin particles obtained by polymerizing a solution containing monofunctional monomer(s) (soluble in polymerization medium and forming

polymers insol. in the medium) in the presence of a dispersion stabilizing resin (soluble in the polymerization medium) that is a comb-type copolymer containing,

as a copolymer component, a macromer ( $M_w$   $1 \times 10^3$  to  $2 \times 10^4$ ) terminated by  $\text{CH}(a_1):\text{C}(a_2)\text{X}_1-$  at one end and  $\text{CH}(a_1):\text{C}(a_2)(\text{X}_1\text{Q}_1)$  in the main chain or comb part of the copolymer, wherein  $\text{X}_0 = \text{CO}_2, \text{O}_2\text{C}, \text{CH}_2\text{O}_2\text{C}, \text{CH}_2\text{CO}_2, \text{O}, \text{SO}_2, \text{CO}, \text{CONR}_{11}, \text{SO}_2\text{NR}_{11}, \text{phenylene}$ ;  $\text{R}_{11} = \text{H}, \text{hydrocarbyl}$ ;  $\text{Q}_1 = \text{C}_{10-22} \text{ alkyl, alkenyl}$ ;  $a_1, a_2 \text{ H, halogen, cyano, hydrocarbyl, CO}_2\text{Z}_1$ ;  $\text{Z}_1 = \text{H, hydrocarbyl}$ .

ST printing plate jet ink polymer particle; comb polymer dispersant resin particle

IT Polymers, preparation

RL: IMF (Industrial manufacture); TEM (Technical or engineered material

use); PREP (Preparation); USES (Uses)  
 (block; oil-based inks with excellent redispersibility and storability,  
 used for ink jet process for making printing plates with excellent  
 printing durability)

IT Polymers, preparation

RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (comb; oil-based inks with excellent redispersibility and storability,  
 used for ink jet process for making printing plates with excellent  
 printing durability)

IT Polymers, preparation

RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (graft; oil-based inks with excellent redispersibility and storability,  
 used for ink jet process for making printing plates with excellent  
 printing durability)

IT Inks

(jet-printing; oil-based inks with excellent redispersibility and  
 storability, used for ink jet process for making printing plates with  
 excellent printing durability)

IT Lithographic plates

(offset; oil-based inks with excellent redispersibility and  
 storability, used for ink jet process for making printing plates with  
 excellent printing durability)

IT 75-08-1DP, Thioethanol, lauryl methacrylate-stearyl acrylate copolymer  
 terminated by, esters with unsatd. carboxylic acids 106-91-2DP, reaction  
 products with mercaptopropionic acid-terminated PMMA 107-96-0DP,  
 Mercaptopropionic acid, PMMA terminated by, reaction products with  
 glycidyl methacrylate 625-38-7DP, 3-Butenoic acid, esters with  
 hydroxyethylthio-terminated lauryl methacrylate-stearyl acrylate copolymer  
 1075-49-6DP, 4-Vinylbenzoic acid, esters with hydroxyethylthio-terminated  
 lauryl methacrylate-stearyl acrylate copolymer 2638-94-0DP,  
 4,4'-Azobis(4-cyanovaleric acid), poly(stearyl methacrylate)-terminated  
 by, reaction products with glycidyl methacrylate 6268-48-0DP,  
 11-Acrylamidoundecanoic acid, esters with hydroxyethylthio-terminated  
 lauryl methacrylate-stearyl acrylate copolymer 9003-32-1DP, Poly(Ethyl  
 acrylate), mercaptopropionic acid-terminated, reaction products with  
 glycidyl methacrylate 9003-53-6DP, Polystyrene, mercaptopropionic  
 acid-terminated, reaction products with glycidyl methacrylate  
 9003-63-8DP, Poly(Butyl methacrylate), mercaptopropionic acid-terminated,  
 reaction products with glycidyl methacrylate 9011-14-7DP, PMMA,  
 mercaptopropionic acid-terminated, reaction products with glycidyl  
 methacrylate 20882-04-6DP, 2-Methacryloyloxyethyl succinate, esters  
 with hydroxyethylthio-terminated lauryl methacrylate-stearyl acrylate  
 copolymer 24615-84-7DP, 2-Carboxyethyl acrylate, esters with  
 hydroxyethylthio-terminated lauryl methacrylate-stearyl acrylate copolymer  
 25639-21-8DP, Poly(octadecyl methacrylate), azobis(cyanovaleric  
 acid)-terminated, reaction products with glycidyl methacrylate  
 25639-21-8DP, Poly(Octadecyl methacrylate), mercaptopropionic  
 acid-terminated, reaction products with glycidyl methacrylate  
 25719-52-2DP, Poly(Dodecyl methacrylate), mercaptopropionic  
 acid-terminated, reaction products with glycidyl methacrylate  
 77756-42-4DP, Tridecyl acrylate homopolymer, mercaptopropionic  
 acid-terminated, reaction products with glycidyl methacrylate  
 135784-92-8DP, mercaptopropionic acid-terminated, reaction products with  
 glycidyl methacrylate 138005-06-8DP, Poly(2,3-diacetoxypropyl  
 methacrylate), mercaptopropionic acid-terminated, reaction products with  
 glycidyl methacrylate 138114-86-0DP, mercaptopropionic acid-terminated,

reaction products with glycidyl methacrylate 138114-93-9DP, Decyl 2-butenate homopolymer, mercaptopropionic acid-terminated, reaction products with glycidyl methacrylate 140693-68-1DP, Dodecyl methacrylate-octadecyl acrylate copolymer, thioethanol-terminated, esters with unsatd. carboxylic acids 163545-34-4DP, mercaptopropionic acid-terminated, reaction products with glycidyl methacrylate 163545-36-6DP, mercaptopropionic acid-terminated, reaction products with glycidyl methacrylate 212135-79-0DP, mercaptopropionic acid-terminated, reaction products with glycidyl methacrylate 212135-80-3DP, mercaptopropionic acid-terminated, reaction products with glycidyl methacrylate

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(oil-based inks with excellent redispersibility and storability, used for ink jet process for making printing plates with excellent printing durability)

IT 107-18-6DP, 2-Propen-1-ol, esters with carboxy-terminated decyl methacrylate-octadecyl methacrylate graft copolymer, preparation 818-61-1DP, esters with carboxy-terminated decyl methacrylate-octadecyl methacrylate graft copolymer 868-77-9DP, esters with carboxy-terminated decyl methacrylate-octadecyl methacrylate graft copolymer 1074-61-9DP, 4-Vinylbenzyl alcohol, esters with carboxy-terminated decyl methacrylate-octadecyl methacrylate graft copolymer 21734-63-4DP, Ethylene glycol monocrotonate, esters with carboxy-terminated decyl methacrylate-octadecyl methacrylate graft copolymer 25012-65-1DP, esters with carboxy-terminated decyl methacrylate-octadecyl methacrylate graft copolymer 25719-52-2P, Poly(Dodecyl methacrylate) 44915-40-4DP, N-(4-Hydroxybutyl)acrylamide, esters with carboxy-terminated decyl methacrylate-octadecyl methacrylate graft copolymer 139357-99-6P, Dodecyl methacrylate-octadecyl methacrylate-vinyl acetate copolymer 140693-68-1P, Dodecyl methacrylate-octadecyl acrylate copolymer 201602-07-5P, Butyl methacrylate-octadecyl acrylate copolymer 212135-81-4P, 2-Decanoyloxyethyl methacrylate-2-(dimethylamino)ethyl methacrylate-dodecyl methacrylate copolymer 212135-82-5P, 4-Dodecyloxymethylstyrene-hexadecyl methacrylate block copolymer 212135-83-6P, Methacrylic acid-dodecyl methacrylate-octadecyl acrylate copolymer 212135-84-7P, Dodecyl methacrylate-octadecyl acrylate-styrene copolymer 212135-85-8P, Dodecyl methacrylate-octyl 2-acryloyloxyethyl 2-butenedioate-N-vinylpyrrolidone copolymer 212135-86-9DP, Decyl methacrylate-octadecyl methacrylate graft copolymer, functional group-terminated 212135-87-0DP, Isopropyl methacrylate-octadecyl methacrylate graft copolymer, functional group-terminated 212135-88-1DP, Isobutene-dodecyl methacrylate-2,3-bis(butanoyloxy)propyl methacrylate graft copolymer, functional group-terminated 212135-89-2DP, Isobutene-hexadecyl methacrylate graft copolymer, functional group-terminated 212135-90-5DP, functional group-terminated 212135-91-6DP, Isobutene-octadecyl methacrylate graft copolymer, functional group-terminated 212135-92-7DP, Isobutene-styrene-docosyl methacrylate graft copolymer, functional group-terminated 212135-94-9DP, methacrylate-terminated 212135-95-0P, Dodecyl methacrylate-octadecyl methacrylate-hexadecyl methacrylate-vinyl acetate block graft copolymer 212135-96-1P, Dodecyl methacrylate-hexadecyl methacrylate-vinyl acetate graft copolymer 212135-97-2P, Butyl methacrylate-octadecyl acrylate-hexadecyl methacrylate-vinyl acetate graft copolymer 212135-98-3P, Hexadecyl methacrylate-vinyl acetate-methacrylic acid-dodecyl methacrylate-octadecyl acrylate graft copolymer 212135-99-4P, Hexadecyl methacrylate-vinyl acetate-dodecyl methacrylate-octadecyl acrylate-styrene graft copolymer 212136-00-0P,

Hexadecyl methacrylate-vinyl acetate-dodecyl methacrylate-octyl  
 2-acryloyloxyethyl 2-butenedioate-N-vinylpyrrolidone graft copolymer  
 212136-01-1P, Hexadecyl methacrylate-vinyl acetate-decyl  
 methacrylate-octadecyl methacrylate graft copolymer 212136-02-2P,  
 Hexadecyl methacrylate-vinyl acetate-isopropyl methacrylate-octadecyl  
 methacrylate graft copolymer 212136-03-3P, Methyl acrylate-methyl  
 methacrylate-isobutene-dodecyl methacrylate-2,3-bis(butanoyloxy)propyl  
 methacrylate graft copolymer 212136-04-4P, Crotonic acid-vinyl  
 acetate-isobutene-hexadecyl methacrylate graft copolymer 212136-05-5P,  
 Methyl acrylate-methyl methacrylate-isobutene-2-dodecanoyloxyethyl  
 methacrylate-octadecyl methacrylate graft copolymer 212136-06-6P, Decyl  
 methacrylate-octadecyl methacrylate-ethyl methacrylate-methyl acrylate  
 graft copolymer 212136-07-7P, Decyl methacrylate-octadecyl  
 methacrylate-vinyl acetate-styrene graft copolymer **212136-08-8P**,  
 Decyl methacrylate-octadecyl methacrylate-vinyl acetate-vinyl propionate  
 graft copolymer **212136-09-9P**, 4-Dodecyloxymethylstyrene-  
 hexadecyl methacrylate-vinyl oleate block graft copolymer 212136-10-2P,  
 Dodecyl methacrylate-octadecyl acrylate-octadecyl vinyl ether graft  
 copolymer 212136-11-3P, Dodecyl methacrylate-octadecyl acrylate-octyl  
 2-methacryloyloxyethyl succinate graft copolymer 212136-13-5P  
 212136-14-6DP, polymers 212136-15-7P 212136-16-8P, Methyl  
 methacrylate-ethyl acrylate-(compound on p. 27)-dodecyl methacrylate-  
 octadecyl acrylate graft copolymer 212136-17-9P, Methyl  
 methacrylate-methyl acrylate-octadecyl  $\alpha$ -chloroacrylate-isobutene-  
 hexadecyl methacrylate graft copolymer 212136-19-1P 212136-22-6P  
 212136-25-9P, Isobutene-octadecyl methacrylate-ethyl methacrylate-methyl  
 acrylate-(compound on p.27) graft copolymer 212136-26-0P, Decyl  
 methacrylate-octadecyl methacrylate-ethyl methacrylate-methyl  
 acrylate-dodecyl acrylate-(compound on p. 27) graft copolymer  
 212136-27-1P, Decyl methacrylate-octadecyl methacrylate-methyl  
 methacrylate-2-cyanoethyl acrylate-methyl acrylate-(compound on p. 27) graft  
 copolymer **212136-28-2P**, Decyl methacrylate-octadecyl  
 methacrylate-vinyl acetate-styrene-vinyl propionate-(compound on p. 27)  
 graft copolymer 212136-29-3P, Isobutene-octadecyl methacrylate-methyl  
 methacrylate-acrylic acid-methyl acrylate-docosanyl acrylate graft  
 copolymer 212210-82-7P, Dodecyl methacrylate-octadecyl methacrylate  
 block copolymer 212210-83-8P, Hexadecyl methacrylate-dodecyl  
 methacrylate-octadecyl methacrylate-vinyl acetate graft copolymer  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)

(oil-based inks with excellent redispersibility and storability, used  
 for **ink jet** process for making printing plates with  
 excellent printing durability)

IT **212136-08-8P**, Decyl methacrylate-octadecyl methacrylate-vinyl  
 acetate-vinyl propionate graft copolymer **212136-09-9P**,  
 4-Dodecyloxymethylstyrene-hexadecyl methacrylate-vinyl oleate block graft  
 copolymer **212136-28-2P**, Decyl methacrylate-octadecyl  
 methacrylate-vinyl acetate-styrene-vinyl propionate-(compound on p. 27)  
 graft copolymer

RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)

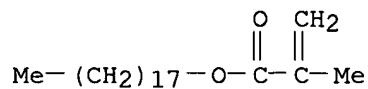
(oil-based inks with excellent redispersibility and storability, used  
 for **ink jet** process for making printing plates with  
 excellent printing durability)

RN 212136-08-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, decyl ester, polymer with ethenyl acetate,  
 ethenyl propanoate and octadecyl 2-methyl-2-propenoate, graft (9CI) (CA  
 INDEX NAME)

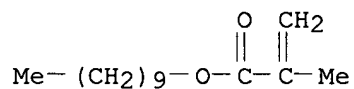
CM 1

CRN 32360-05-7  
CMF C22 H42 O2



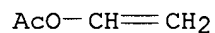
CM 2

CRN 3179-47-3  
CMF C14 H26 O2



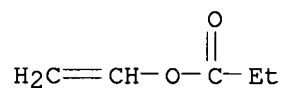
CM 3

CRN 108-05-4  
CMF C4 H6 O2



CM 4

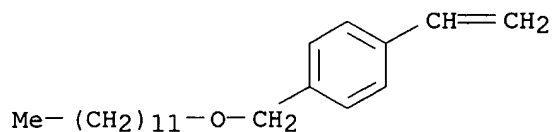
CRN 105-38-4  
CMF C5 H8 O2



RN 212136-09-9 HCAPLUS  
CN 9-Octadecenoic acid (9Z)-, ethenyl ester, polymer with  
1-[(dodecyloxy)methyl]-4-ethenylbenzene and hexadecyl 2-methyl-2-  
propenoate, block, graft (9CI) (CA INDEX NAME)

CM 1

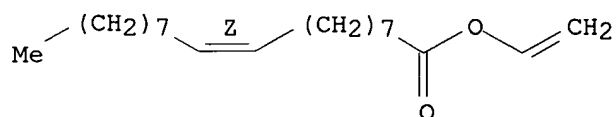
CRN 175221-63-3  
CMF C21 H34 O



CM 2

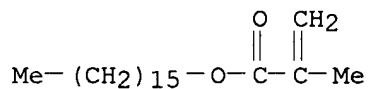
CRN 3896-58-0  
CMF C20 H36 O2

Double bond geometry as shown.



CM 3

CRN 2495-27-4  
CMF C20 H38 O2

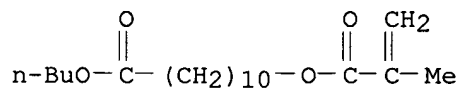


RN 212136-28-2 HCAPLUS

CN Undecanoic acid, 11-[(2-methyl-1-oxo-2-propenyl)oxy]-, butyl ester, polymer with decyl 2-methyl-2-propenoate, ethenyl acetate, ethenylbenzene, ethenyl propanoate and octadecyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

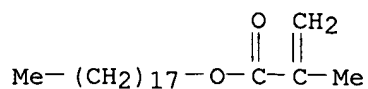
CM 1

CRN 212122-29-7  
CMF C19 H34 O4



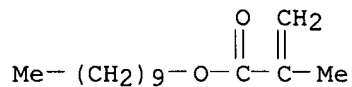
CM 2

CRN 32360-05-7  
CMF C22 H42 O2



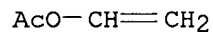
CM 3

CRN 3179-47-3  
CMF C14 H26 O2



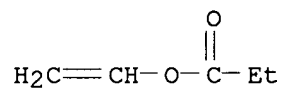
CM 4

CRN 108-05-4  
CMF C4 H6 O2



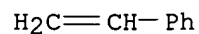
CM 5

CRN 105-38-4  
CMF C5 H8 O2



CM 6

CRN 100-42-5  
CMF C8 H8



L8 ANSWER 50 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
AN 1995:978698 HCAPLUS  
DN 124:11163  
TI Dispersants for aqueous ink for ink jet recording dense images with good fastness  
IN Kado, Seiji; Kosaka, Hiromi; Ishii, Masayuki  
PA Mita Industrial Co. Ltd., Japan

SO Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM C09D011-00

CC 42-12 (Coatings, Inks, and Related Products)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 671447	A2	19950913	EP 1995-301400	19950303
	EP 671447	A3	19970102		
	R: CH, DE, FR, GB, IT, LI				
	JP 07242849	A2	19950919	JP 1994-36086	19940307
	JP 3387610	B2	20030317		
	US 5506295	A	19960409	US 1995-382528	19950202
PRAI	JP 1994-36086	A	19940307		

AB Ink superior in storage stability and jetting stability comprises an aqueous medium, a H<sub>2</sub>O-soluble colorant, and a dispersant for dispersing the colorant in the aqueous medium, the dispersant being a H<sub>2</sub>O-soluble polymer obtainable by polymerizing monomer comprising  $\geq 1$  monomer selected from acryloylmorpholine and styrene sulfonates CH<sub>2</sub>:CH-p-C<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>M (M = an alkaline metal atom or an amino group), optionally lower fatty acid vinyl esters or styrene. An aqueous solution of sodium styrene sulfonate-vinyl pivalate copolymer (d.p. 30) dispersant was added to C black, diethylene glycol, 2-propanol, and monoethanolamine to give an ink.

ST sodium styrene sulfonate copolymer dispersant ink; vinyl pivalate copolymer dispersant ink; acryloylmorpholine copolymer dispersant ink; styrene sulfonate copolymer dispersant ink; jet printing ink dispersant aq copolymer

IT Dispersing agents

(acryloylmorpholine or styrene sulfonate polymer; dispersants for aqueous ink for ink jet recording dense images with good fastness)

IT Inks

(jet-printing, storage-stable, acryloylmorpholine or styrene sulfonate polymer; dispersants for aqueous ink for ink jet recording dense images with good fastness)

IT 28902-82-1P, N-Acryloylmorpholine homopolymer 39307-76-1P, Sodium styrene sulfonate-styrene copolymer 62744-35-8P, Sodium styrenesulfonate polymer 146899-17-4P **171352-84-4P 171352-85-5P**

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (dispersants for aqueous ink for ink jet recording dense images with good fastness)

IT **171352-84-4P 171352-85-5P**

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (dispersants for aqueous ink for ink jet recording dense images with good fastness)

RN 171352-84-4 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, ethenyl ester, polymer with sodium ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 27457-28-9

CMF C8 H8 O3 S . Na

CCI IDS



D1-CH=CH<sub>2</sub>

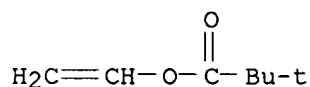
D1-SO<sub>3</sub>H

● Na

CM 2

CRN 3377-92-2

CMF C7 H12 O2



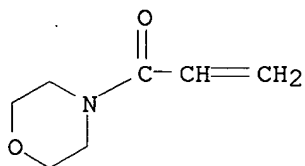
RN 171352-85-5 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, ethenyl ester, polymer with  
4-(1-oxo-2-propenyl)morpholine (9CI) (CA INDEX NAME)

CM 1

CRN 5117-12-4

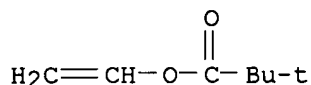
CMF C7 H11 N O2



CM 2

CRN 3377-92-2

CMF C7 H12 O2



L8 ANSWER 51 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 1993:49324 HCAPLUS  
 DN 118:49324  
 TI Ink-jet recording receptor with good ink-absorbing and ink-drying properties  
 IN Furukawa, Akira  
 PA Mitsubishi Paper Mills, Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM B41M005-00  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04147887	A2	19920521	JP 1990-273706	19901011
	JP 3059474	B2	20000704		
PRAI	JP 1990-273706		19901011		

AB The title media comprise a support with a coating of  $\geq 1$  ink-receiving layer, on which images are formed by using a water-soluble dye-containing aqueous ink, containing a copolymer prepared essentially from

(1)  $\geq 10$  parts of a monomer selected from p-styrenesulfonic acid and its alkali metal salts, (meth)acrylamide, (meth)acrylic acid and its metal salts or organic amine-neutralized salts, and 2-acrylamide-2-methylpropanesulfonic acid and its alkali metal salts or organic amine-neutralized salts, and (2) 0.1-10 weight parts (to the total monomers) of a polyfunctional vinyl monomer selected from divinylbenzene, methylenebisacrylamide (I), ethylene glycol di(meth)acrylate, and vinyl (meth)acrylate. The copolymer is prepared by using water and a water-miscible organic solvent and in the presence of poly(vinyl alc.) or polyvinylpyrrolidone in the reaction system to form its fine particles. The media show good ink-absorbing and ink-drying properties and provide clear, high resolution images. Thus, Na p-styrenesulfonate and I (80:1.5 weight ratio) were copolymd. in a solution of PVA 103 [poly(vinyl alc.)] in a H<sub>2</sub>O-EtOH mixture, and the resulting resin was mixed with Finesil X-37B (SiO<sub>2</sub>) and coated on a paper support to give an ink-jet recording paper.

ST ink jet recording medium receptor

IT Printing, nonimpact  
 (ink-jet, receptors, with good ink-absorbing and ink-drying properties)

IT 9002-89-5, Poly(vinyl alcohol) 9003-39-8, Polyvinylpyrrolidone  
 RL: USES (Uses)  
 (in manufacture of vinyl copolymer, for ink-jet recording receptor)

IT 82200-27-9 145228-42-8 **145394-70-3** 145435-41-2  
 RL: USES (Uses)  
 (ink-jet recording receptor using)

IT **145394-70-3**  
 RL: USES (Uses)

(ink-jet recording receptor using)

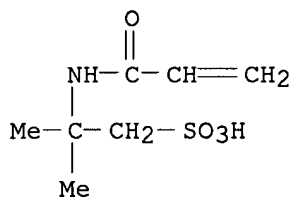
RN 145394-70-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, hydrochloride, polymer with ethenyl 2-methyl-2-propenoate, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monopotassium salt and sodium 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 52825-28-2

CMF C7 H13 N O4 S . K

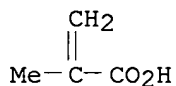


● K

CM 2

CRN 5536-61-8

CMF C4 H6 O2 . Na

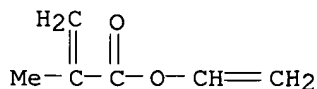


● Na

CM 3

CRN 4245-37-8

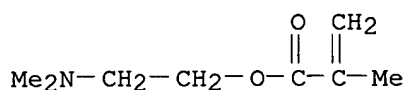
CMF C6 H8 O2



CM 4

CRN 2421-44-5

CMF C8 H15 N O2 . Cl H



● HCl

L8 ANSWER 52 OF 52 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1987:536020 HCAPLUS

DN 107:136020

TI Inks for jet printing

PA Xerox Corp., USA

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D011-00

ICS C09D011-00

CC 42-10 (Coatings, Inks, and Related Products)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62095366	A2	19870501	JP 1986-238979	19861007
	US 4692188	A	19870908	US 1985-787594	19851015
PRAI	US 1985-787594		19851015		

AB The title inks with improved wetfastness and reduced wicking properties are prepared containing water-insol. dyes entrained in polymer particles. A solution from 4.5 g Bu acrylate-styrene copolymer, 1.5 g Sudan Black B, and 50 mL CH<sub>2</sub>Cl<sub>2</sub> was dispersed in 200 mL 0.25% aqueous Na dodecyl sulfate using an ultrasonic disperser and stripped of solvent by evaporation to give a water-thinned ink.

ST jet printing ink waterborne; styrene methacrylate copolymer waterborne ink

IT Polycarbonates, uses and miscellaneous

RL: USES (Uses)

(water-insol. dyes entrained in, for water-thinned inks for ink-jet printing)

IT Inks

(jet-printing, water-thinned, water-insol. dye-entrained resin binders in, with improved wetfastness and reduced wicking)

IT **9003-95-6**, Poly(vinyl stearate) 24936-68-3, uses and miscellaneous 25037-45-0 25213-39-2, Butyl methacrylate-styrene copolymer

RL: USES (Uses)

(water-insol. dyes entrained in, for water-thinned inks for ink-jet printing)

IT **9003-95-6**, Poly(vinyl stearate)

RL: USES (Uses)

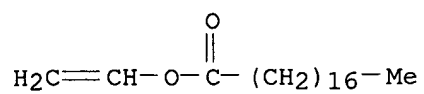
(water-insol. dyes entrained in, for water-thinned inks for ink-jet printing)

RN 9003-95-6 HCAPLUS

CN Octadecanoic acid, ethenyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 111-63-7  
CMF C20 H38 O2



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